

Sequence Listing



<110> Eaton, Dan L.
Filvaroff, Ellen
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala
50 55 60
Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
65 70 75
Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
80 85 90
Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
95 100 105
Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
110 115 120
Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
125 130 135

Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile
140 145 150

Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr Glu Phe Ile Val Ser
155 160 165

Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser Thr Ile Pro Ala
170 175 180

Pro Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser Ile Pro Arg
185 190 195

Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu Thr Ser
200 205 210

Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala Ala
215 220 225

Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu
230 235 240

Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly
245 250 255

Phe Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn
260 265 270

Lys Asn Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu
275 280 285

Glu Lys Ala Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr
290 295 300

Asp Lys Asn Pro Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val
305 310 315

Arg Cys Leu Glu Ala Glu Val
320

<210> 7
<211> 2586
<212> DNA
<213> Homo Sapien

<400> 7
cgccgcgcgc cgcacccgc ggccgcggca ccgcgcgcgt cccgcatctg 50
cacccgcagc cggcgccct cccggcgaaa gcgagcagat ccagtccggc 100
ccgcagcgcactcgtcca gtcggggcg cggctgcggg cgcaagacgg 150
agatgcagcg gcttggggcc accctgctgt gcctgctgct ggccggcg 200
gtccccacgg ccccgccgc cgcgtccgacg gcaacctcg ctccagtcaa 250
gcccggcccg gctctcagct acccgcagga ggaggccacc ctcaatgaga 300

tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350
agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400
agaagtgaac ctggcaaact tacctccag ctatcacaat gagaccaaca 450
cagacacgaa ggttggaaat aataccatcc atgtgcaccg agaaattcac 500
aagataacca acaaccagac tggacaaatg gtctttcag agacagttat 550
cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcg 600
acgaggactg tggcccccagc atgtactgcc agtttgccag cttccagttac 650
acctgccagc catgccgggg ccagaggatg ctctgcaccc gggacagtga 700
gtgctgtgga gaccagctgt gtgtctgggg tcactgcacc aaaatggcca 750
ccaggggcag caatggacc atctgtgaca accagaggga ctgccagccg 800
gggctgtgct gtgccttcca gagaggcctg ctgttccctg tgtgcacacc 850
cctgcccgtg gagggcgagc tttgccatga cccgcgcagc cggcttctgg 900
acctcatcac ctgggagcta gagcctgatg gagccttggc ccgatgccct 950
tgtgccagtg gcctcccttg ccagccccac agccacagcc tggtgtatgt 1000
gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050
tgcccagaga ggtccccat gагтатгааг ttggcagtt catggaggag 1100
gtgcgccagg agctggagga cctggagagg agcctgactg aagagatggc 1150
gctgggggag cctgcggctg ccggccgtgc actgctggga gggaaagaga 1200
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catcttcttc ccagtaagtt tccccctctgg ctgcacagca tgaggtgtt 1350
tgcathtt cagctcccc aggctgttct ccaggctca cagtctgg 1400
cttgggagag tcagggcaggg taaaactgca ggagcagtt gccaccctg 1450
tccagattat tggctgcttt gcctctacca gttggcagac agccgtttgt 1500
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agtctccctc tgattggttt tggggaaatg tggagaagag tgccctgctt 1600
tgcaaacatc aacctggcaa aaatgcaaca aatgaatttt ccacgcagtt 1650
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tctctcagca cagcctgggg agggggtcat tgtttcctc gtccatcagg 1850
gatctcagag gctcagagac tgcaagctgc ttgccaagt cacacagcta 1900
gtgaagacca gagcagttc atctggtgt gactctaagc tcagtgcct 1950
ctccactacc ccacaccaggc cttggtgcca ccaaaagtgc tccccaaaag 2000
gaaggagaat gggatTTTC ttgaggcatg cacatctgga attaaggta 2050
aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100
gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150
cactgtccct ctggcagt tgcattagta actttgaaag gtatatgact 2200
gagcgttagca tacaggttaa cctgcagaaa cagtagttag gtaattgttag 2250
ggcgaggatt ataaatgaaa ttgcaaaaat cacttagcag caactgaaga 2300
caattatcaa ccacgtggag aaaatcaaac cgagcaggc tgtgtgaaac 2350
atggttgtaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400
tgatgtttc aggtgtcatg gactgtgcc accatgtatt catccagagt 2450
tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500
tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550
cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8
<211> 350
<212> PRT
<213> Homo Sapien

<400> 8
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala
1 5 10 15

Ala Val Pro Thr Ala Pro Ala Pro Ala Pro Thr Ala Thr Ser Ala
20 25 30

Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala
35 40 45

Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
50 55 60

Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
65 70 75

Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu

80	85	90
Pro Pro Ser Tyr His Asn Glu Thr Asn	Thr Asp Thr Lys Val Gly	
95	100	105
Asn Asn Thr Ile His Val His Arg Glu	Ile His Lys Ile Thr Asn	
110	115	120
Asn Gln Thr Gly Gln Met Val Phe Ser	Glu Thr Val Ile Thr Ser	
125	130	135
Val Gly Asp Glu Glu Gly Arg Arg Ser	His Glu Cys Ile Ile Asp	
140	145	150
Glu Asp Cys Gly Pro Ser Met Tyr Cys	Gln Phe Ala Ser Phe Gln	
155	160	165
Tyr Thr Cys Gln Pro Cys Arg Gly Gln	Arg Met Leu Cys Thr Arg	
170	175	180
Asp Ser Glu Cys Cys Gly Asp Gln Leu	Cys Val Trp Gly His Cys	
185	190	195
Thr Lys Met Ala Thr Arg Gly Ser Asn	Gly Thr Ile Cys Asp Asn	
200	205	210
Gln Arg Asp Cys Gln Pro Gly Leu Cys	Cys Ala Phe Gln Arg Gly	
215	220	225
Leu Leu Phe Pro Val Cys Thr Pro Leu	Pro Val Glu Gly Glu Leu	
230	235	240
Cys His Asp Pro Ala Ser Arg Leu Leu	Asp Leu Ile Thr Trp Glu	
245	250	255
Leu Glu Pro Asp Gly Ala Leu Asp Arg	Cys Pro Cys Ala Ser Gly	
260	265	270
Leu Leu Cys Gln Pro His Ser His Ser	Leu Val Tyr Val Cys Lys	
275	280	285
Pro Thr Phe Val Gly Ser Arg Asp Gln	Asp Gly Glu Ile Leu Leu	
290	295	300
Pro Arg Glu Val Pro Asp Glu Tyr Glu	Val Gly Ser Phe Met Glu	
305	310	315
Glu Val Arg Gln Glu Leu Glu Asp Leu	Glu Arg Ser Leu Thr Glu	
320	325	330
Glu Met Ala Leu Gly Glu Pro Ala Ala	Ala Ala Ala Leu Leu	
335	340	345
Gly Gly Glu Glu Ile		
350		

<211> 1395
<212> DNA
<213> Homo Sapien

<400> 9
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tgtgcgtttt ccagggctac tcatccaaag gcctaattcca acgttctgtc 150
ttcaatctgc aaatctatgg ggtcctgggg ctcttcttgg cccttaactg 200
ggtaactggcc ctgggc当地 ggcgtcctcgatgc tggagccttt gcctccttct 250
actgggc当地 ccacaagcccc caggacatcc ctacccccc cttaatctct 300
gccttc当地 ccacactccg ttaccacact gggtcattgg catttggagc 350
cctcatccgt acccttgcgtc agatagcccc ggtcatcttg gagtatattg 400
accacaagct cagaggagtg cagaaccctg tagcccgctg catcatgtgc 450
tggttcaagt gctgcctctg gtgtctggaa aaatttatca agttcctaaa 500
ccgcaatgca tacatcatga tcgccc当地 cggagaagat ttctgtgtct 550
cagccaaaaa tgccgttcatg ctactcatgc gaaacattgt cagggtggtc 600
gtcctggaca aagtcacaga cctgctgtc ttcttggga agctgctggt 650
ggtcggagc gtgggggtcc tgccttctt tttttctcc ggtcgcatcc 700
cggggctggg taaagacttt aagagcccc acctcaacta ttactggctg 750
cccatcatga cctccatcct gggggcctat gtcatcgcca gcggcttctt 800
cagcgtttc ggc当地gtgtc tggacacgtc cttcctctgc ttccctggaaag 850
acctggagcg gaacaacggc tccctggacc ggc当地tacta catgtccaag 900
agccttctaa agattctggg caagaagaac gaggcgcccc cgacaaccaa 950
gaagaggaag aagtgc当地gc tccggccctg atccaggact gcacccacc 1000
cccaccgtcc agccatccaa cctcacttgc cttacaggt ctccattttg 1050
tggtaaaaaa aggttttagg ccaggcgccg tggctcacgc ctgtatcca 1100
acactttgag aggctgaggc gggcggatca cctgagtcag gagttcgaga 1150
ccagcctggc caacatggtg aaacctccgt ctctattaaa aatacaaaaa 1200
ttagccgaga gtggtggcat gcacctgtca tcccaagctac tcggggaggct 1250
gaggcaggag aatcgcttga acccgggagg cagaggtgc agtgagccga 1300

gatcgccca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350
aaacaaacaa acaaaaagat tttattaaag atatttgtt aactc 1395

<210> 10
<211> 321
<212> PRT
<213> Homo Sapien

<400> 10
Arg Thr Arg Gly Arg Thr Arg Gly Gly Cys Glu Lys Val Pro Ile
1 5 10 15
Asn Thr Ser Cys Asn Pro Thr Ala His Leu Val Asn Ser Ser Cys
20 25 30
Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
35 40 45
Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
50 55 60
Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
65 70 75
Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
80 85 90
Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
95 100 105
Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
110 115 120
Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His
125 130 135
Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys
140 145 150
Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe
155 160 165
Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn
170 175 180
Phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn
185 190 195
Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu
200 205 210
Phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser
215 220 225
Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe
230 235 240

Lys Ser Pro His Leu Asn Tyr Tyr Trp Leu Pro Ile Met Thr Ser
245 250 255
Ile Leu Gly Ala Tyr Val Ile Ala Ser Gly Phe Phe Ser Val Phe
260 265 270
Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp Leu
275 280 285
Glu Arg Asn Asn Gly Ser Leu Asp Arg Pro Tyr Tyr Met Ser Lys
290 295 300
Ser Leu Leu Lys Ile Leu Gly Lys Lys Asn Glu Ala Pro Pro Asp
305 310 315
Asn Lys Lys Arg Lys Lys
320

<210> 11
<211> 1901
<212> DNA
<213> Homo Sapien

<400> 11
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gcctgcctgg gagcctgctc cctgctcagc tgcgcgctt gcctctgcgg 100
ctctgccccc tgcatttgtt gcagctgtt ccccgccagc cgcaactcca 150
ccgtgagccg cctcatcttc acgttcttcc tcttcctggg ggtgctggtg 200
tccatcatata tgctgagccc gggcgtggag agtcagctt acaagctgcc 250
ctgggtgtgtt gaggaggggg ccgggatccc caccgttctt cagggccaca 300
tcgactgtgg ctccctgttt ggctaccgcg ctgtctaccg catgtgtttc 350
gccacggccgg cttttttttt ctttttttcc accctgttca tgctctgcgt 400
gagcagcagc cgggaccccc gggctgccat ccagaatggg ttttgggtct 450
ttaagttcctt gatcctggtg ggccttaccg tgggtgcctt ctacatccct 500
gacggcttctt tcaccaacat ctgggttctac ttccggcgctg tgggtccctt 550
ccttttcatc ctcattccagc tgggtctgtt catcgactttt ggcacttcc 600
ggaaccagcg gtggctgggc aaggccgagg agtgcgattt ccgtgcctgg 650
tacgcaggcc tcttcttctt cactcttccctt ttctacttgc tgtcgatcgc 700
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agggcaaggtt cttcatcagc ctcaacccat cttctgtgtt ctgcgtgtcc 800
atcgctgttg tcctgccccaa ggtccaggac gcccagccca actcgggtct 850

gctgcaggcc tcggcatca ccctctacac catttgtc acctggtcag 900
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gtggatgcc ccgagcattt tgccctcat catttcctc ctgtgcaccc 1050
tcttcatcag tctgcgtcc tcagaccacc ggcaggtgaa cagcctgatg 1100
cagaccgagg agtgcaccacc tatgcttagac gccacacagc agcagcagca 1150
gcaggtggca gcctgtgagg gccgggcctt tgacaacgag caggacggcg 1200
tcacctacag ctactccttc ttccacttct gcctggtgct ggcctcactg 1250
cacgtcatga tgacgctcac caactggta aagcccggt agacccggaa 1300
gatgatcagc acgtggaccg ccgtgtgggt gaagatctgt gccagctggg 1350
cagggctgct cctctacctg tggaccctgg tagccccact cctcctgcgc 1400
aaccgcgact tcagctgagg cagcctcaca gcctgccatc tggcctcc 1450
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caccaatcag ccaggtgag ccccccaccc tgccccagct ccaggacctg 1550
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caggctcctg cagagccca tccccccgac acacccacac ggtggagctg 1650
cctttccctt cccctcctcc ctgttgccca tactcagcat ctggatgaa 1700
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ggggactcc caccacagt gggcatccgg cactgaagcc ctgggtttcc 1800
tggtcacgtc ccccaggga ccctgcccc ttccctggact tcgtgcctta 1850
ctgagtctct aagactttt ctaataaaca agccagtgcg tgtaaaaaaaa 1900

a 1901

<210> 12
<211> 457
<212> PRT
<213> Homo Sapien

<400> 12
Met Gly Ala Cys Leu Gly Ala Cys Ser Leu Leu Ser Cys Ala Ser
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Cys Leu Cys Gly Ser Ala Pro Cys Ile Leu Cys Ser Cys Cys Pro
20 25 30
Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe

	35	40	45
Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly			
50	55	60	
Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly			
65	70	75	
Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser			
80	85	90	
Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala			
95	100	105	
Ala Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser			
110	115	120	
Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe			
125	130	135	
Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr			
140	145	150	
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val			
155	160	165	
Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile			
170	175	180	
Asp Phe Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu			
185	190	195	
Glu Cys Asp Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr			
200	205	210	
Leu Leu Phe Tyr Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe			
215	220	225	
Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val Phe			
230	235	240	
Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala			
245	250	255	
Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu			
260	265	270	
Gln Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser			
275	280	285	
Ala Leu Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro			
290	295	300	
Thr Gln Leu Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr			
305	310	315	
Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile			

	320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His			
335	340	345	
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met			
350	355	360	
Leu Asp Ala Thr Gln Gln Gln Gln Gln Val Ala Ala Cys Glu			
365	370	375	
Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr			
380	385	390	
Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met			
395	400	405	
Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met			
410	415	420	
Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp			
425	430	435	
Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro Leu Leu			
440	445	450	
Leu Arg Asn Arg Asp Phe Ser			
455			

<210> 13
 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 13
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 cttagggat ggtgagggtt gaaaaagact cctgtaaccc tcctccagga 100
 tgaaccacct gccagaagac atggagaacg ctctcacccg gagccagagc 150
 tccccatgctt ctctgcgcaa tatccattcc atcaacccca cacaactcat 200
 ggccaggatt gagtcctatg aaggaaggga aaagaaaggc atatctgatg 250
 tcaggaggac ttctgtttt gttgtcacct ttgacctttt attcgtaaca 300
 ttactgtgga taatagagtt aaatgtgaat ggaggcattt agaacacatt 350
 agagaaggag gtgatgcagt atgactacta ttcttcataat tttgatatat 400
 ttcttctggc agttttcga tttaaagtgt taatacttgc atatgctgtg 450
 tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500
 tgcctttta ctagcaaaag tgatccttgc gaagctttc tctcaagggg 550

cttttggcta tgtgctgccc atcatttcat tcatccttgc ctggatttag 600
acgtggttcc tggatttcaa agtgttacct caagaagcag aagaagaaaa 650
cagactcccg atagttcagg atgcttcaga gagggcagca cttatacctg 700
tggtgtttc tgatggtcag ttttattccc ctcctgaatc cgaagcagga 750
tctgaagaag ctgaagaaaa acaggacagt gagaaaccac ttttagaact 800
atgagtacta ctttgttaa atgtgaaaaa ccctcacaga aagtcatcga 850
ggcaaaaaga ggcaggcagt ggagtctccc tgtcgacagt aaagttgaaa 900
tggtgacgac cactgctggc tttattgaac agctaataaa gatttattta 950
ttgttaatacc tcacaaacgt tgtaccatat ccatgcacat ttagttgcct 1000
gcctgtggct ggtaaggtaa tgtcatgatt catcctctct tcagtgagac 1050
tgagcctgat gtgttaacaa ataggtgaag aaagtcttgt gctgtattcc 1100
taatcaaaag acttaatata ttgaagtaac acttttttag taagcaagat 1150
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atttattttg tatttcttt ttaacactct acatttccct tgtttttaa 1250
ctcatgcaca tgtgctctt gtacagttt aaaaagtgtaa ataaaatctg 1300
acatgtcaat gtggctagtt ttatTTTCT tgTTTGCAT tatgtgtatg 1350
gcctgaagtg ttggacttgc aaaagggaa gaaaggaatt gcgaatacat 1400
gtaaaaatgtc accagacatt tgtattttt ttatcatgaa atcatgttt 1450
tctctgattt ttctgaaatg ttctaaatac tcttattttg aatgcacaaa 1500
atgacttaaa ccattcatat catgtttcct ttgcgttcag ccaatttcaa 1550
ttaaaaatgaa ctaaattaaa aa 1572

<210> 14
<211> 234
<212> PRT
<213> Homo Sapien

<400> 14
Met Asn His Leu Pro Glu Asp Met Glu Asn Ala Leu Thr Gly Ser
1 5 10 15
Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro
20 25 30
Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys
35 40 45
Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr

	50	55	60
Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn			
65	70	75	
Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln			
80	85	90	
Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val			
95	100	105	
Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu			
110	115	120	
Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala			
125	130	135	
Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly			
140	145	150	
Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp			
155	160	165	
Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala			
170	175	180	
Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg			
185	190	195	
Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser			
200	205	210	
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln			
215	220	225	
Asp Ser Glu Lys Pro Leu Leu Glu Leu			
230			

<210> 15
 <211> 2768
 <212> DNA
 <213> Homo Sapien

<400> 15
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 cagggaaagac tgaggccgcg gcctgccccg cccggctccc tgcgccgcg 100
 ccgcctcccg ggacagaaga tgtgctccag ggtccctctg ctgctgccgc 150
 tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200
 tgccagtgca gccagccaca gacagtctc tgcactgccc gccagggac 250
 cacggtgccc cgagacgtgc cacccgacac ggtggggctg tacgtcttg 300
 agaacggcat caccatgctc gacgcaggca gcttgcggg cctgcccggc 350

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<210> 16
<211> 673
<212> PRT
<213> Homo Sapien

<400> 16
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20 25 30
Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
35 40 45

Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
50 55 60

Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu
65 70 75

Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
80 85 90

Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu
95 100 105

Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe
110 115 120

Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg
125 130 135

Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu
140 145 150

Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro
155 160 165

Leu Arg Leu Pro Arg Leu Leu Leu Asp Leu Ser His Asn Ser
170 175 180

Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu
185 190 195

Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly
200 205 210

Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp
215 220 225

Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly
230 235 240

Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu
245 250 255

Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp
260 265 270

Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly
275 280 285

Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe
290 295 300

Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu
305 310 315

Ser His Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe
320 325 330

Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala
335 340 345

Asp Phe Gly Cys Pro Ala Thr Thr Thr Ala Thr Val Pro Thr
350 355 360

Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu
365 370 375

Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro
380 385 390

Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln
395 400 405

Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys
410 415 420

His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly
425 430 435

Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg
440 445 450

Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr
455 460 465

Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu
470 475 480

Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg
485 490 495

Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr
500 505 510

Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu
515 520 525

Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro
530 535 540

Gly Arg Val Pro Glu Gly Glu Ala Cys Gly Glu Ala His Thr
545 550 555

Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg
560 565 570

Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val
575 580 585

Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg
590 595 600

Arg Gly Arg Ala Met Ala Ala Ala Gln Asp Lys Gly Gln Val
605 610 615

Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro
620 625 630

Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Glu Ala Leu
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Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly
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Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile
665 670

<210> 17

<211> 1672

<212> DNA

<213> Homo Sapien

<400> 17

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gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
ccatactact gcaggcagag tagttgctgg tcaaataattt cttgattcag 250
aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
agccaagagg gggaaagtgt cacagaagat atcagcttc tagagtctcc 350
aaatccagaa aacaaggact atgaagagcc aaagaaaagta cggaaaccag 400
ctttgaccgc cattgaaggc acagcacatg gggagccctg ccacttcct 450
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cagaatgact ccagagagct ctactttctg tttttactt ttcatgattg 1450
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<210> 18
<211> 301
<212> PRT
<213> Homo Sapien

<400> 18
Met Arg Val Arg Ile Gly Leu Thr Leu Leu Cys Ala Val Leu
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Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp
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Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val
35 40 45

Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe
50 55 60

Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu
65 70 75

Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp
80 85 90

Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu
95 100 105

Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly
110 115 120

Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp
					125				130					135
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg
					140				145					150
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp
					155				160					165
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met
					170				175					180
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn
					185				190					195
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu
					200				205					210
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val
					215				220					225
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln
					230				235					240
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro
					245				250					255
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly
					260				265					270
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly
					275				280					285
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg
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Leu														

<210> 19
<211> 1508
<212> DNA
<213> Homo Sapien

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agggggaaaa atgctctttt gggtgctagg cctcctaatac ctctgtggtt 150
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
tacatttta tcactggatg tgactcgccc tttggaaact tggcagccag 250
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caggatcaac agctttaaag gcagaaaacct cagagagact tcgtactgtg 350
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taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaa 1508

<210> 20
<211> 319
<212> PRT
<213> Homo Sapien

<400> 20
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				20				25						30	
Tyr	Ile	Phe	Ile	Thr	Gly	Cys	Asp	Ser	Gly	Phe	Gly	Asn	Leu	Ala	
				35				40						45	
Ala	Arg	Thr	Phe	Asp	Lys	Lys	Gly	Phe	His	Val	Ile	Ala	Ala	Cys	
				50				55						60	
Leu	Thr	Glu	Ser	Gly	Ser	Thr	Ala	Leu	Lys	Ala	Glu	Thr	Ser	Glu	
				65				70						75	
Arg	Leu	Arg	Thr	Val	Leu	Leu	Asp	Val	Thr	Asp	Pro	Glu	Asn	Val	
				80				85						90	
Lys	Arg	Thr	Ala	Gln	Trp	Val	Lys	Asn	Gln	Val	Gly	Glu	Lys	Gly	
				95				100						105	
Leu	Trp	Gly	Leu	Ile	Asn	Asn	Ala	Gly	Val	Pro	Gly	Val	Leu	Ala	
				110				115						120	
Pro	Thr	Asp	Trp	Leu	Thr	Leu	Glu	Asp	Tyr	Arg	Glu	Pro	Ile	Glu	
				125				130						135	
Val	Asn	Leu	Phe	Gly	Leu	Ile	Ser	Val	Thr	Leu	Asn	Met	Leu	Pro	
				140				145						150	
Leu	Val	Lys	Lys	Ala	Gln	Gly	Arg	Val	Ile	Asn	Val	Ser	Ser	Val	
				155				160						165	
Gly	Gly	Arg	Leu	Ala	Ile	Val	Gly	Gly	Gly	Tyr	Thr	Pro	Ser	Lys	
				170				175						180	
Tyr	Ala	Val	Glu	Gly	Phe	Asn	Asp	Ser	Leu	Arg	Arg	Asp	Met	Lys	
				185				190						195	
Ala	Phe	Gly	Val	His	Val	Ser	Cys	Ile	Glu	Pro	Gly	Leu	Phe	Lys	
				200				205						210	
Thr	Asn	Leu	Ala	Asp	Pro	Val	Lys	Val	Ile	Glu	Lys	Lys	Leu	Ala	
				215				220						225	
Ile	Trp	Glu	Gln	Leu	Ser	Pro	Asp	Ile	Lys	Gln	Gln	Tyr	Gly	Glu	
				230				235						240	
Gly	Tyr	Ile	Glu	Lys	Ser	Leu	Asp	Lys	Leu	Lys	Gly	Asn	Lys	Ser	
				245				250						255	
Tyr	Val	Asn	Met	Asp	Leu	Ser	Pro	Val	Val	Glu	Cys	Met	Asp	His	
				260				265						270	
Ala	Leu	Thr	Ser	Leu	Phe	Pro	Lys	Thr	His	Tyr	Ala	Ala	Gly	Lys	
				275				280						285	
Asp	Ala	Lys	Ile	Phe	Trp	Ile	Pro	Leu	Ser	His	Met	Pro	Ala	Ala	

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Pro Lys Ala Val			

<210> 21

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 21

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tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
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<210> 22
<211> 409
<212> PRT
<213> Homo Sapien

<400> 22
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Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
35 40 45

Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
50 55 60

Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
65 70 75
Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
80 85 90

Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
95 100 105

Ser Asp Gln Ile Met Thr Phe Arg Glu Arg Leu Leu His Lys Asn
110 115 120

Leu Gln Glu His Phe Ser Asn Gln Asp Leu Val Phe Leu Leu Leu
125 130 135

Thr Pro Ser Ile Ile Thr Glu Ser Cys Ser Thr His Arg Leu Glu
140 145 150

His Ser Leu Tyr Lys Pro Gln Lys Gly Leu Phe His Arg Val Pro
155 160 165

Leu Val Val Ala Asn Leu Gly Met Ser Glu Gln Leu Gly Tyr Lys
170 175 180

Thr Val Ser Gly Ser Cys Met Ser Thr Gly Phe Ser Arg Ala Val
185 190 195

Gln Thr His Ser Ser Lys Phe Phe Glu Glu Asp Gly Ser Leu Lys
200 205 210

Glu Val His Lys Ile Asn Glu Met Tyr Ala Ser Leu Gln Glu Glu
215 220 225

Leu Lys Ser Ile Cys Lys Lys Val Glu Asp Ser Glu Gln Ala Val
230 235 240

Asp Lys Leu Val Lys Asp Val Asn Arg Leu Lys Arg Glu Ile Glu
245 250 255

Lys Arg Arg Gly Ala Gln Ile Gln Ala Ala Arg Glu Lys Asn Ile
260 265 270

Gln Lys Asp Pro Gln Glu Asn Ile Phe Leu Cys Gln Ala Leu Arg
275 280 285

Thr Phe Phe Pro Asn Ser Glu Phe Leu His Ser Cys Val Met Ser
290 295 300

Leu Lys Asn Arg His Val Ser Lys Ser Ser Cys Asn Tyr Asn His
305 310 315

His Leu Asp Val Val Asp Asn Leu Thr Leu Met Val Glu His Thr
320 325 330

Asp Ile Pro Glu Ala Ser Pro Ala Ser Thr Pro Gln Ile Ile Lys
335 340 345

His Lys Ala Leu Asp Leu Asp Asp Arg Trp Gln Phe Lys Arg Ser
350 355 360

Arg Leu Leu Asp Thr Gln Asp Lys Arg Ser Lys Ala Asn Thr Gly
365 370 375

Ser Ser Asn Gln Asp Lys Ala Ser Lys Met Ser Ser Pro Glu Thr
380 385 390

Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg
395 400 405

Ser Pro Thr Phe

<210> 23
<211> 2651
<212> DNA
<213> Homo Sapien

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c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

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20 25 30

Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn
35 . 40 45

Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys
50 55 60

Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr
65 70 75

Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln
80 85 90

Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe
95 100 105

Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu
110 115 120

Asn Asp Met Phe Val Lys Thr Tyr Gly His Leu Tyr Met Gln Asn
125 130 135

Ser Glu Leu Phe Lys Asp Leu Phe Val Glu Leu Lys Arg Tyr Tyr
140 145 150

Val Val Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp
155 160 165

Ala Arg Leu Leu Glu Arg Met Phe Arg Leu Val Asn Ser Gln Tyr
170 175 180

His Phe Thr Asp Glu Tyr Leu Glu Cys Val Ser Lys Tyr Thr Glu
185 190 195

Gln Leu Lys Pro Phe Gly Asp Val Pro Arg Lys Leu Lys Leu Gln
200 205 210

Val Thr Arg Ala Phe Val Ala Ala Arg Thr Phe Ala Gln Gly Leu
215 220 225

Ala Val Ala Gly Asp Val Val Ser Lys Val Ser Val Val Asn Pro

230 235 240
Thr Ala Gln Cys Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser
245 250 255

His Cys Arg Gly Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys
260 265 270

Ser Asn Ile Met Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp
275 280 285

Phe Glu Trp Asn Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu
290 295 300

Arg Leu Glu Gly Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile
305 310 315

Asp Val Lys Ile Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser
320 325 330

Val Gln Val Ser Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys
335 340 345

Pro Leu Pro Ala Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala
350 355 360

Phe Ser Ala Arg Phe Arg Pro His His Pro Glu Glu Arg Pro Thr
365 370 375

Thr Ala Ala Gly Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys
380 385 390

Glu Lys Leu Lys Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser
395 400 405

Asn Val Cys Asn Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu
410 415 420

Asp Asp Cys Trp Asn Gly Lys Gly Ser Arg Tyr Leu Phe Ala
425 430 435

Val Thr Gly Asn Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val
440 445 450

Gln Val Asp Thr Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile
455 460 465

Met Ala Leu Arg Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn
470 475 480

Gly Asn Asp Val Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly
485 490 495

Glu Gly Ser Gly Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu
500 505 510

Phe Asp Tyr Asn Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu

515 520 525

Lys Ala Asp Ser Ala Gly Val Arg Pro Gly Ala Gln Ala Tyr Leu
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Leu Thr Val Phe Cys Ile Leu Phe Leu Val Met Gln Arg Glu Trp
545 550 555

Arg

<210> 25

<211> 870

<212> DNA

<213> Homo Sapien

<400> 25

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cgtatgaaagt tctaattctt tccctcctcc tggatgtgcc actaatgctg 200

atgtccatgg tctcttagcag cctgaatcca ggggtcgcca gaggccacag 250

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gtgtctggc tgccaaagaa gcagtgcctt tggatgtcatt tcaaggcata 400

tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaaggcatt 450

ccagagcctg ccagcaattt cttaaacaat gtcaagcttgc aagctttgt 500

ctgcctttgt aggagctctg agcgcccact cttccaaatca aacattctca 550

gccaagaaga cagtggcacc acctaccaga cactttctt ctcccacctc 600

actctccac tgtacccacc cctaaatcat tccagtgtc tcaaaaagca 650

tgttttcaa gatcattttg tttgttgctc tctctgtgt cttcttctct 700

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tcaaaaaaaaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26
Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Pro Leu Met
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Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg
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Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu
35 40 45

Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
50 55 60
Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
65 70 75

Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
80 85 90

Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
95 100 105

Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu
110 115

<210> 27
<211> 1371
<212> DNA
<213> Homo Sapien

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gcagctgctg gtgctgcttc ttaccctgccc cctgcacctc atggctctgc 150
tgggctgctg gcagccccctg tgcaaaagct acttccccta cctgatggcc 200
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<210> 28

<211> 277

<212> PRT

<213> Homo Sapien

<400> 28

Met	Asp	Ile	Leu	Val	Pro	Leu	Leu	Gln	Leu	Leu	Val	Leu	Leu	Leu
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Thr	Leu	Pro	Leu	His	Leu	Met	.Ala	Leu	Leu	Gly	Cys	Trp	Gln	Pro
					20				25					30

Leu	Cys	Lys	Ser	Tyr	Phe	Pro	Tyr	Leu	Met	Ala	Val	Leu	Thr	Pro
					35				40					45

Lys	Ser	Asn	Arg	Lys	Met	Glu	Ser	Lys	Lys	Arg	Glu	Leu	Phe	Ser
					50				55					60

Gln	Ile	Lys	Gly	Leu	Thr	Gly	Ala	Ser	Gly	Lys	Val	Ala	Leu	Leu
					65				70					75

Glu	Leu	Gly	Cys	Gly	Thr	Gly	Ala	Asn	Phe	Gln	Phe	Tyr	Pro	Pro
					80				85					90

Gly	Cys	Arg	Val	Thr	Cys	Leu	Asp	Pro	Asn	Pro	His	Phe	Glu	Lys
					95				100					105

Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu

	110	115	120
Arg Phe Val Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp			
125	130	135	
Gly Ser Met Asp Val Val Val Cys Thr Leu Val Leu Cys Ser Val			
140	145	150	
Gln Ser Pro Arg Lys Val Leu Gln Glu Val Arg Arg Val Leu Arg			
155	160	165	
Pro Gly Gly Val Leu Phe Phe Trp Glu His Val Ala Glu Pro Tyr			
170	175	180	
Gly Ser Trp Ala Phe Met Trp Gln Gln Val Phe Glu Pro Thr Trp			
185	190	195	
Lys His Ile Gly Asp Gly Cys Cys Leu Thr Arg Glu Thr Trp Lys			
200	205	210	
Asp Leu Glu Asn Ala Gln Phe Ser Glu Ile Gln Met Glu Arg Gln			
215	220	225	
Pro Pro Pro Leu Lys Trp Leu Pro Val Gly Pro His Ile Met Gly			
230	235	240	
Lys Ala Val Lys Gln Ser Phe Pro Ser Ser Lys Ala Leu Ile Cys			
245	250	255	
Ser Phe Pro Ser Leu Gln Leu Glu Gln Ala Thr His Gln Pro Ile			
260	265	270	
Tyr Leu Pro Leu Arg Gly Thr			
275			

<210> 29
<211> 494
<212> DNA
<213> Homo Sapien

<400> 29
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gactggtcgg tgcccgaaaa gtctcttctg ccactgacgc ccccatcagg 150
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atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400

cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450
taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30
<211> 73
<212> PRT
<213> Homo Sapien

<400> 30
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Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
20 25 30
Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
35 40 45
Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 31
<211> 1660
<212> DNA
<213> Homo Sapien

<400> 31
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<210> 32
<211> 445
<212> PRT
<213> Homo Sapien

<400> 32
Met Ser Gly Arg Asp Thr Ile Leu Gly Leu Cys Ile Leu Ala Leu
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Ala Leu Ser Leu Ala Met Met Phe Thr Phe Arg Phe Ile Thr Thr
20 25 30
Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu
35 40 45
Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
50 55 60

Asp Leu Ser Ile Glu Leu Asp Thr Glu Arg Glu Asn Met Lys Cys
65 70 75

Val Leu Gly Phe Ala Ile Val Ser Thr Gly Ile Thr Ala Val Leu
80 85 90

Leu Val Leu Ile Phe Val Leu Arg Lys Arg Ile Lys Leu Thr Val
95 100 105

Glu Leu Phe Gln Ile Thr Asn Lys Ala Ile Ser Ser Ala Pro Phe
110 115 120

Leu Leu Phe Gln Pro Leu Trp Thr Phe Ala Ile Leu Ile Phe Phe
125 130 135

Trp Val Leu Trp Val Ala Val Leu Ser Leu Gly Thr Ala Gly
140 145 150

Ala Ala Gln Val Met Glu Gly Gly Gln Val Glu Tyr Lys Pro Leu
155 160 165

Ser Gly Ile Arg Tyr Met Trp Ser Tyr His Leu Ile Gly Leu Ile
170 175 180

Trp Thr Ser Glu Phe Ile Leu Ala Cys Gln Gln Met Thr Ile Ala
185 190 195

Gly Ala Val Val Thr Cys Tyr Phe Asn Arg Ser Lys Asn Asp Pro
200 205 210

Pro Asp His Pro Ile Leu Ser Ser Leu Ser Ile Leu Phe Phe Tyr
215 220 225

His Gln Gly Thr Val Val Lys Gly Ser Phe Leu Ile Ser Val Val
230 235 240

Arg Ile Pro Arg Ile Ile Val Met Tyr Met Gln Asn Ala Leu Lys
245 250 255

Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu Phe Arg Cys Cys
260 265 270

Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu His Leu Asn
275 280 285

Gln Asn Ala Tyr Thr Thr Ala Ile Asn Gly Thr Asp Phe Cys
290 295 300

Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser Ser
305 310 315

His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu
320 325 330

Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met
335 340 345

Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu
350 355 360

Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu
365 370 375

Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala
380 385 390

Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe
395 400 405

Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu
410 415 420

Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu
425 430 435

Glu Gly Thr Glu Leu Gln Ala Ile Val Arg
440 445

<210> 33
<211> 2773
<212> DNA
<213> Homo Sapien

<400> 33
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aaggggaaaaaa gaatattcat tctgtgttgt gaaaattttt tgaaaaaaaaa 150
attgccttct tc当地acaagg gtgtcattct gatatttatg aggactgtt 200
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gttcactgtg cctcagatca actgcgtatgt caaagccgga aagatcatcg 350
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catgtttatg gcactgacgt gtatgcattcc tactccagtg tgtgtggcgc 450
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<210> 34
<211> 678
<212> PRT
<213> Homo Sapien

<400> 34
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Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
20 25 30
Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
35 40 45
Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
50 55 60
Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
65 70 75
Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
80 85 90
His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
95 100 105
Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
110 115 120
Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
125 130 135

Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu
140 145 150

Thr Tyr Ser Ser Ser Lys Ser Pro Ala Ala Gln Ala Gly Glu Thr
155 160 165

Thr Lys Ala Tyr Gln Arg Pro Pro Ile Pro Gly Thr Thr Ala Gln
170 175 180

Pro Val Thr Leu Met Gln Leu Leu Ala Val Thr Val Ala Val Ala
185 190 195

Thr Pro Thr Thr Leu Pro Arg Pro Ser Pro Ser Ala Ala Ser Thr
200 205 210

Thr Ser Ile Pro Arg Pro Gln Ser Val Gly His Arg Ser Gln Glu
215 220 225

Met Asp Leu Trp Ser Thr Ala Thr Tyr Thr Ser Ser Gln Asn Arg
230 235 240

Pro Arg Ala Asp Pro Gly Ile Gln Arg Gln Asp Pro Ser Gly Ala
245 250 255

Ala Phe Gln Lys Pro Val Gly Ala Asp Val Ser Leu Gly Leu Val
260 265 270

Pro Lys Glu Glu Leu Ser Thr Gln Ser Leu Glu Pro Val Ser Leu
275 280 285

Gly Asp Pro Asn Cys Lys Ile Asp Leu Ser Phe Leu Ile Asp Gly
290 295 300

Ser Thr Ser Ile Gly Lys Arg Arg Phe Arg Ile Gln Lys Gln Leu
305 310 315

Leu Ala Asp Val Ala Gln Ala Leu Asp Ile Gly Pro Ala Gly Pro
320 325 330

Leu Met Gly Val Val Gln Tyr Gly Asp Asn Pro Ala Thr His Phe
335 340 345

Asn Leu Lys Thr His Thr Asn Ser Arg Asp Leu Lys Thr Ala Ile
350 355 360

Glu Lys Ile Thr Gln Arg Gly Gly Leu Ser Asn Val Gly Arg Ala
365 370 375

Ile Ser Phe Val Thr Lys Asn Phe Phe Ser Lys Ala Asn Gly Asn
380 385 390

Arg Ser Gly Ala Pro Asn Val Val Val Met Val Asp Gly Trp
395 400 405

Pro Thr Asp Lys Val Glu Glu Ala Ser Arg Leu Ala Arg Glu Ser
410 415 420

Gly Ile Asn Ile Phe Phe Ile Thr Ile Glu Gly Ala Ala Glu Asn
425 430 435

Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val
440 445 450

Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe
455 460 465

Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp
470 475 480

Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp
485 490 495

Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn
500 505 510

Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe
515 520 525

Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr
530 535 540

Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys
545 550 555

Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly
560 565 570

Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu
575 580 585

Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile
590 595 600

Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala
605 610 615

Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp
620 625 630

Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg
635 640 645

Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr
650 655 660

Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln
665 670 675

Pro Arg Asn

<210> 35
<211> 2095
<212> DNA

<213> Homo Sapien

<400> 35

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tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 36

<211> 331

<212> PRT

<213> Homo Sapien

<400> 36

Met Ala Ser Ala Leu Trp Thr Val Leu Pro Ser Arg Met Ser Leu
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Arg Ser Leu Lys Trp Ser Leu Leu Leu Ser Leu Leu Ser Phe
20 25 30

Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu
35 40 45

Arg Val Asn Trp Met Tyr Phe Tyr Glu Pro Ile Tyr Arg
50 55 60

Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
65 70 75

Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
80 85 90

Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln
 110 115 120

Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp
 125 130 135

Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp
 140 145 150

Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp
 155 160 165

Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp
 170 175 180

Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu
 185 190 195

Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile
 200 205 210

Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser
 215 220 225

Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly
 230 235 240

Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu
 245 250 255

Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val
 260 265 270

Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu
 275 280 285

Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys
 290 295 300

Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu
 305 310 315

Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His
 320 325 330

Tyr

<210> 37
 <211> 2846
 <212> DNA
 <213> Homo Sapien

<400> 37
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<210> 38
<211> 720
<212> PRT
<213> Homo Sapien

<400> 38
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Leu Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn
20 25 30

Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
35 40 45

Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
50 55 60

Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
65 70 75

Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
80 85 90

Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
95 100 105

Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp
110 115 120

Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro
125 130 135

Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys
140 145 150

Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg
155 160 165

Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp
170 175 180

Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile
185 190 195

Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln Ser Ile
200 205 210

Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys Asn
215 220 225

Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser
230 235 240

Ser Ser Pro Cys Phe His Asp Gly Thr Cys Val Leu Asp Lys Ala
245 250 255

Gly Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg
260 265 270

Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser Asp Pro Gly Gly
275 280 285

Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile
290 295 300
Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys
305 310 315

Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln
320 325 330

Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala
335 340 345

Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu
350 355 360

Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr
365 370 375

Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys
380 385 390

Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His
395 400 405

Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg
410 415 420

Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp
425 430 435

Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu
440 445 450

Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln
455 460 465

Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu
470 475 480

His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn
485 490 495

Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly
500 505 510

Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly
515 520 525

Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser
530 535 540

Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile
545 550 555

Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala
560 565 570

Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg
575 580 585
Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly
590 595 600
Trp Asn Val Leu Ala Asp Val Arg Ser Pro Gly Phe Lys Asn Asp
605 610 615
Thr Leu Arg Ser Gly Val Val Ser Val Val Asp Ser Leu Leu Cys
620 625 630
Glu Glu Gln His Glu Asp His Gly Ile Pro Val Ser Val Thr Asp
635 640 645
Asn Met Phe Cys Ala Ser Trp Glu Pro Thr Ala Pro Ser Asp Ile
650 655 660
Cys Thr Ala Glu Thr Gly Gly Ile Ala Ala Val Ser Phe Pro Gly
665 670 675
Arg Ala Ser Pro Glu Pro Arg Trp His Leu Met Gly Leu Val Ser
680 685 690
Trp Ser Tyr Asp Lys Thr Cys Ser His Arg Leu Ser Thr Ala Phe
695 700 705
Thr Lys Val Leu Pro Phe Lys Asp Trp Ile Glu Arg Asn Met Lys
710 715 720

<210> 39
<211> 2571
<212> DNA
<213> Homo Sapien

<400> 39
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cccgaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600
gttgaatgtg gatggggtcg aactgacaga ggtcagccgg agtgaggcag 1650
tggcattatt gaaaagaaca tcatcctcga tagtactcaa agctttggaa 1700
gtcaaagagt atgagccccaa ggaagactgc agcagcccg cagccctgga 1750
ctccaaccac aacatggccc cacccagtga ctggccccca tcctgggtca 1800
tgtggctgga attaccacgg tgcttgtata actgtaaaga tattgtatta 1850
cgaagaaaaca cagctggaag tctgggcttc tgcattgttag gaggttatga 1900
agaatacaat ggaaacaaac ctttttcat caaatccatt gttgaaggaa 1950

caccagcata caatgatgga agaatttagat gtggtgatat tcttcttgct 2000
gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050
gctgaaaagaa cttaaaggaa gaattactct aactattgtt tcttggcctg 2100
gcacttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150
aaataggcta agaagttgaa acactatatt tatcttgtca gtttttatat 2200
ttaaagaaag aatacattgt aaaaatgtca ggaaaagtat gatcatctaa 2250
tgaaagccag ttacacctca gaaaatatga ttccaaaaaaaa attaaaacta 2300
ctagttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350
atatttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
tgtataccccc actgaattca agctgattta aatttaaat ttggtatatg 2450
ctgaagtctg ccaagggtac attatggcca ttttaattt acagctaaaa 2500
tatttttaa aatgcattgc tgagaaacgt tgcttcatc aaacaagaat 2550
aaatattttt cagaagttaa a 2571

<210> 40
<211> 632
<212> PRT
<213> Homo Sapien

<400> 40
Met Lys Ala Leu Leu Leu Val Leu Pro Trp Leu Ser Pro Ala
1 5 10 15

Asn Tyr Ile Asp Asn Val Gly Asn Leu His Phe Leu Tyr Ser Glu
20 25 30

Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
35 40 45

Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
50 55 60

Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
65 70 75

Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
80 85 90

Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
95 100 105

Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
110 115 120

Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu

	125	130	135
Arg Arg Thr Lys Ser Gly Ser Ala Val Ala Asn His Ala Asp Gln			
140	145	150	
Gly Arg Glu Asn Ser Glu Asn Thr Thr Ala Pro Glu Val Phe Pro			
155	160	165	
Arg Leu Tyr His Leu Ile Pro Asp Gly Glu Ile Thr Ser Ile Lys			
170	175	180	
Ile Asn Arg Val Asp Pro Ser Glu Ser Leu Ser Ile Arg Leu Val			
185	190	195	
Gly Gly Ser Glu Thr Pro Leu Val His Ile Ile Ile Gln His Ile			
200	205	210	
Tyr Arg Asp Gly Val Ile Ala Arg Asp Gly Arg Leu Leu Pro Gly			
215	220	225	
Asp Ile Ile Leu Lys Val Asn Gly Met Asp Ile Ser Asn Val Pro			
230	235	240	
His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro Cys Gln Val Leu			
245	250	255	
Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser Arg Asn Asn			
260	265	270	
Gly Gln Ala Pro Asp Ala Tyr Arg Pro Arg Asp Asp Ser Phe His			
275	280	285	
Val Ile Leu Asn Lys Ser Ser Pro Glu Glu Gln Leu Gly Ile Lys			
290	295	300	
Leu Val Arg Lys Val Asp Glu Pro Gly Val Phe Ile Phe Asn Val			
305	310	315	
Leu Asp Gly Gly Val Ala Tyr Arg His Gly Gln Leu Glu Glu Asn			
320	325	330	
Asp Arg Val Leu Ala Ile Asn Gly His Asp Leu Arg Tyr Gly Ser			
335	340	345	
Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser Glu Arg Arg Val			
350	355	360	
His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser Pro Asp Ile			
365	370	375	
Phe Gln Glu Ala Gly Trp Asn Ser Asn Gly Ser Trp Ser Pro Gly			
380	385	390	
Pro Gly Glu Arg Ser Asn Thr Pro Lys Pro Leu His Pro Thr Ile			
395	400	405	
Thr Cys His Glu Lys Val Val Asn Ile Gln Lys Asp Pro Gly Glu			

410	415	420
Ser Leu Gly Met Thr Val Ala Gly Gly Ala Ser His Arg Glu Trp		
425	430	435
Asp Leu Pro Ile Tyr Val Ile Ser Val Glu Pro Gly Gly Val Ile		
440	445	450
Ser Arg Asp Gly Arg Ile Lys Thr Gly Asp Ile Leu Leu Asn Val		
455	460	465
Asp Gly Val Glu Leu Thr Glu Val Ser Arg Ser Glu Ala Val Ala		
470	475	480
Leu Leu Lys Arg Thr Ser Ser Ile Val Leu Lys Ala Leu Glu		
485	490	495
Val Lys Glu Tyr Glu Pro Gln Glu Asp Cys Ser Ser Pro Ala Ala		
500	505	510
Leu Asp Ser Asn His Asn Met Ala Pro Pro Ser Asp Trp Ser Pro		
515	520	525
Ser Trp Val Met Trp Leu Glu Leu Pro Arg Cys Leu Tyr Asn Cys		
530	535	540
Lys Asp Ile Val Leu Arg Arg Asn Thr Ala Gly Ser Leu Gly Phe		
545	550	555
Cys Ile Val Gly Gly Tyr Glu Glu Tyr Asn Gly Asn Lys Pro Phe		
560	565	570
Phe Ile Lys Ser Ile Val Glu Gly Thr Pro Ala Tyr Asn Asp Gly		
575	580	585
Arg Ile Arg Cys Gly Asp Ile Leu Leu Ala Val Asn Gly Arg Ser		
590	595	600
Thr Ser Gly Met Ile His Ala Cys Leu Ala Arg Leu Leu Lys Glu ..		
605	610	615
Leu Lys Gly Arg Ile Thr Leu Thr Ile Val Ser Trp Pro Gly Thr		
620	625	630
Phe Leu		

<210> 41
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 41
 accaggcatt gtatcttcag ttgtcatcaa gttcgcaatc agattggaaa 50
 agctcaacctt gaagctttct tgcctgcagt gaagcagaga gatagatatt 100

attcacgtaa taaaaaacat gggcttcaac ctgactttcc acctttccta 150
caaattccga ttactgttgc tggtgacttt gtgcctgaca gtgggtgggt 200
gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
aaggagttca tggctaattt ccataagacc ctcattttgg ggaagggaaa 300
aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
ccggtatcgc cctcaggaat gtaaagctt acagagggtc gccatcctcg 500
ttccccaccc gaacagagag aaacacctga tgtacctgct ggaacatctg 550
catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtggct 650
atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
gtggacctgg tacccgagaa tgactttAAC ctttacaagt gtgaggagca 750
tcccaagcat ctgggggttgcaggaacag cactgggtac aggttacgtt 800
acagtggata tttgggggt gttactgccc taagcagaga gcagttttc 850
aaggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
tgacctcaga ctcagggttg agctccaaag aatgaaaatt tcccggcccc 950
tgccctgaagt gggtaaatat acaatggct tccacactag agacaaaggc 1000
aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
ctggagaaca gatgggttga gtagtttttc ttataaatta gtatctgtgg 1100
aacacaatcc tttatatatac aacatcacag tggatttctg gtttggtgca 1150
tgaccctgga tctttgggtg atgtttgaa gaactgattc tttgttgca 1200
ataattttgg cctagagact tcaaataatgtc gcacacatta agaacctgtt 1250
acagctcatt gttgagctga atttttcattt tttgttattt cttagcagag 1300
ctcctggta tgttagagtat aaaacagttg taacaagaca gctttcttag 1350
tcattttgat catgagggtt aaatattgtt atatggatac ttgaaggact 1400
ttatataaaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
tggttgaagg agatttattt aaatttgaaag taatataatta tgggataaaa 1500
ggccacagga aataagactg ctgaatgtct gagagaacca gagttttct 1550

cgtccaaggt agaaaggta cagaataca tactgttatt catttatcct 1600
gtacaatcat ctgtgaagt gtgggtgtcag gtgagaaggc gtccacaaaa 1650
gaggggagaa aaggcgacga atcaggacac agtgaacttg ggaatgaaga 1700
ggtagcagga ggggtggagt tcggctgcaa aggagcagt agctgagctg 1750
gttcaggtg ctgatagcct tcaggggagg acctgcccag gtatgccttc 1800
cagtgtatgcc caccagagaa tacattctct attagtttt aaagagttt 1850
tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
acatattaac taataataaa tatgtctatc aaataccctc gtagtaaaat 1950
gtgaaaaagc aaaa 1964

<210> 42
<211> 344
<212> PRT
<213> Homo Sapien

<400> 42
Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu
1 5 10 15
Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr
20 25 30
Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
35 40 45
Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
50 55 60
Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
65 70 75
Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
80 85 90
Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
95 100 105
Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
110 115 120
Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
125 130 135
His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
140 145 150
Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
155 160 165

Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu
170 175 180

Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val
185 190 195

Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu
200 205 210

His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg
215 220 225

Leu Arg Tyr Ser Gly Tyr Phe Gly Gly Val Thr Ala Leu Ser Arg
230 235 240

Glu Gln Phe Phe Lys Val Asn Gly Phe Ser Asn Asn Tyr Trp Gly
245 250 255

Trp Gly Gly Glu Asp Asp Asp Leu Arg Leu Arg Val Glu Leu Gln
260 265 270

Arg Met Lys Ile Ser Arg Pro Leu Pro Glu Val Gly Lys Tyr Thr
275 280 285

Met Val Phe His Thr Arg Asp Lys Gly Asn Glu Val Asn Ala Glu
290 295 300

Arg Met Lys Leu Leu His Gln Val Ser Arg Val Trp Arg Thr Asp
305 310 315

Gly Leu Ser Ser Cys Ser Tyr Lys Leu Val Ser Val Glu His Asn
320 325 330

Pro Leu Tyr Ile Asn Ile Thr Val Asp Phe Trp Phe Gly Ala
335 340

<210> 43
<211> 485
<212> DNA
<213> Homo Sapien

<400> 43
gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50
gctcccagat ctgggccgct tgcctcctgc tcctcctcct cctcgccagc 100
ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
gcaacccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200
agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250
ggctgctgtc atcgatcaa gtgtggatg tgctgcaaga cgtagaacct 300
acctgccctg ccccggtccc ctcccttcct tatttattcc tgctgcccc 350
gaacataggt cttggaataa aatggcttgt tctttgttt tccaaaaaaaa 400

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 450

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu
1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100

gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150

tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200

tcaacacaac ccctcttgc accatacagc cagaaggggg cactatcata 250

gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300

ctccctgaag ctcagcaaac tgaagaagaa tgactcaggg atctactatg 350

tggggatata cagctcatca ctccagcagc cctccaccca ggagtacgtg 400

ctgcatgtct acgagcacct gtcaaaggct aaagtaccca tgggtctgca 450

gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcacatggAAC 500

atggggaaaga ggtatgtgatt tatacctgga aggcctggg gcaagcagcc 550

aatgagtccc ataatgggtc catcctcccc atccctgga gatggggaga 600
aagtgatatg accttcatct gcgttgcag gaaccctgtc agcagaaaact 650
tctcaagccc catccttgcc aggaagctct gtgaagggtgc tgctgatgac 700
ccagattcct ccatggtcct cctgtgtctc ctgttggtgc ccctcctgct 750
cagtctctt gtactgggc tatttctttg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcggaaact 850
cctaacaatat gcccccattc tggagagaac acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaaggct atttgcctat gagaatgtta tctagacacg 1050
agtgcactcc cctaagtctc tgctca 1076

<210> 46
<211> 335
<212> PRT
<213> Homo Sapien

<400> 46
Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
1 5 10 15

Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45

Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60

Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75

Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90

Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105

Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120

Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135

Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150

Cys Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr Thr Trp Lys
155 160 165

Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn Gly Ser Ile Leu
170 175 180

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln
245 250 255

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp
275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala
290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
320 325 330

Tyr Glu Asn Val Ile
335

<210> 47
<211> 766
<212> DNA
<213> Homo Sapien

<400> 47
ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50
gacatcctgc aatggattca gcctgcttgt tctactgctg ttaggagtag 100
ttctcaatgc gataacctta attgtcagct tagttgagga agaccaattt 150
tctcaaaaacc ccatctttg ctggagtg gggttcccag gaattatagg 200
agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
aaagagcgtg ctgcaacaac agaactggaa tgtttcttc atcattttc 300

agtgtgatca cagtcattgg tgctctgtat tgcacatgtat tatccatcca 350
ggctcttta aaaggcctc tcatagtgtaa ttctccaagg aacagtaatg 400
ccaattgtga attttcattt aaaaacatca gtgacattca tccagaatcc 450
ttcaacttgc agtggtttt caatgactct tgtgcacctc ctactggttt 500
caataaaacc accagtaacg acaccatggc gagtggctgg agagcatcta 550
gtttccactt cgattctgaa gaaaacaac ataggcttat ccacttctca 600
gtatTTTtag gtctattgct tgTTGGAATT ctggaggtcc tgTTGGGCT 650
cagtcagata gtcatcggtt tcctggctg tctgtgtgga gtctctaaggc 700
gaagaagtca aattgtgttag tttaatggaa ataaaatgtat agtacagta 750
gtttgaaaaaa aaaaaaa 766

<210> 48
<211> 229
<212> PRT
<213> Homo Sapien

<400> 48
Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu
1 5 10 15
Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
20 25 30
Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
35 40 45
Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
50 55 60
Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
65 70 75
Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
80 85 90
Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
95 100 105
Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
110 115 120
Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
125 130 135
Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
140 145 150
Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr

	155		160		165
Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu					
	170		175		180
Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu					
	185		190		195
Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile					
	200		205		210
Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg					
	215		220		225
Ser Gln Ile Val					

<210> 49
<211> 636
<212> DNA
<213> Homo Sapien

<400> 49
atccgttctc tgcgctgcc a gtcagg tga g c c c t c g c c a aggtgac c t c 50
g c a g g a c a c t g g t a a g g a g a c a g t g a g g a a g a g a g t a c a c a g a g t t g 100
c t g a c c a a t t g a g c t g t g a g c t g g a g c a g a t c c c g t g g g c t g c a g a c c c c 150
c g c c c c a g t g c c t c t c c c t g a g c c t g c a a c t g a c a t g g 200
a g a g a g t g a c c t g g c c c t t c t a c t g g a g g c c t g a c t g c c t t g g a a 250
g c c a a t g a c c c a t t g c c a a t a a g a c g a t c c t t c t a c t a t g a c t g g a a 300
a a a c c t g c a g c t g a g c g g a c t g a t c t g c g g a g g g c t c t g c g c a t t g c t g 350
g g a t c g c g g c a g t t c t g a g t g g a a g c a a t g c a a t a c a a g a g a g c a g c a g a a g 400
c a g c a c a g t c t g a c t g a g g c c a t c c a c t c a t c a c t g c a g g c t c 450
t g c c a c t a c t t g c t g a g c a c a g g a c t g g c c t c c a g g g a t g g a a g g c c 500
t a a c a c t g g c c c c a g c a c c t c t c c c t g g a g g c c t t a a c t c a a g g a a g g a 550
a g g a c t t c t c t c a a g g g c a g g c t t a g g a g g g c a g g g c 600
t t c t t t a t q a a t t a a c t c q c c c a c c a c c a c c t c a 636

<210> 50
<211> 89
<212> PRT
<213> Homo Sapien

<400> 50
Met Glu Arg Val Thr Leu Ala Leu Leu Leu Ala Gly Leu Thr
1 5 10 15

Ala	Leu	Glu	Ala	Asn	Asp	Pro	Phe	Ala	Asn	Lys	Asp	Asp	Pro	Phe
20						25							30	
Tyr	Tyr	Asp	Trp	Lys	Asn	Leu	Gln	Leu	Ser	Gly	Leu	Ile	Cys	Gly
35							40						45	
Gly	Leu	Leu	Ala	Ile	Ala	Gly	Ile	Ala	Ala	Val	Leu	Ser	Gly	Lys
50							55						60	
Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu
65							70						75	
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys	
80						85								

<210> 51
<211> 1734
<212> DNA
<213> Homo Sapien

<400> 51
gtggactctg agaagccca gtcagttgagg acaggagaga gaaggctgca 50
gaccaggagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
agacactctg gagagagagg gggctggca gagatgaagt tccaggggcc 200
cctggcctgc ctcctgctgg ccctctgcct gggcagtggg gaggctggcc 250
ccctgcagag cggagaggaa agcactggaa caaatattgg ggaggccctt 300
ggacatggcc tgggagacgc cctgagcgaa ggggtggaa aggccattgg 350
caaagaggcc ggagggcag ctggctctaa agtcagttag gcccattggcc 400
aaggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
ggaaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
acggagcaga tgctgtccgc ggctcctggc agggggtgcc tggccacagt 600
gtgcttggg aaacctctgg aggcattggc atctttggct ctcaaggtagg 650
ccttggaggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
tccacggata cccccggaaac tcagcaggca gctttggaaat gaatcctcag 750
ggagctccct ggggtcaagg aggcaatggaa gggccaccaa actttggac 800
caacactca gggactgtgg cccagcctgg ctatggta gtgagagcca 850
gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcaggtgg 900

ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
gcagtggcag cagcagtggc agcagcagtgc gcggcagcag tggcggcagc 1050
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tgagtcctcc tgggatcca gcaccggctc ctccctccggc aaccacggtg 1150
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<210> 52
<211> 440
<212> PRT
<213> Homo Sapien

<400> 52
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20 25 30
Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
35 40 45
Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
50 55 60
Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
65 70 75
Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
80 85 90

Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
95 100 105

Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
110 115 120

Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
125 130 135

Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile
140 145 150

Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro
155 160 165

Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser
170 175 180

Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln
185 190 195

Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly
200 205 210

Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn Gln
215 220 225

Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly
230 235 240

Ser Ser Asn Ser Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser
245 250 255

Gly Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly
260 265 270

Gly Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Gly Gly Ser
275 280 285

Ser Gly Gly Ser Ser Gly Ser Ser Gly Asn Ser Gly Gly Ser
290 295 300

Arg Gly Asp Ser Gly Ser Glu Ser Ser Trp Gly Ser Ser Thr Gly
305 310 315

Ser Ser Ser Gly Asn His Gly Gly Ser Gly Gly Gly Asn Gly His
320 325 330

Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu Ala Arg Gly Ser Gly
335 340 345

Glu Ser Gly Ile Gln Gly Phe Arg Gly Gln Gly Val Ser Ser Asn
350 355 360

Met Arg Glu Ile Ser Lys Glu Gly Asn Arg Leu Leu Gly Gly Ser
365 370 375

Gly Asp Asn Tyr Arg Gly Gln Gly Ser Ser Trp Gly Ser Gly Gly
380 385 390
Gly Asp Ala Val Gly Gly Val Asn Thr Val Asn Ser Glu Thr Ser
395 400 405
Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser
410 415 420
Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg
425 430 435
Ser Ser Arg Ile Pro
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<210> 53

<211> 1676

<212> DNA

<213> Homo Sapien .

<400> 53

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gtcatgaata aaacggtgct gtcaaa 1676

<210> 54
<211> 524
<212> PRT
<213> Homo Sapien

<400> 54
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Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu
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35 40 45
Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
50 55 60
Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
65 70 75
Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
80 85 90
Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
95 100 105

Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys
110 115 120

Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly
125 130 135

Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met
140 145 150

Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr
155 160 165

Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His
170 175 180

Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile
185 190 195

Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe
200 205 210

Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile
215 220 225

Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu
230 235 240

Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg
245 250 255

Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val
260 265 270

Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp
275 280 285

Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp
290 295 300

Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp
305 310 315

Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His
320 325 330

Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala
335 340 345

Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu
350 355 360

Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu
365 370 375

Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg
380 385 390

Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp
395 400 405

Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys
410 415 420

Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro
425 430 435

Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser
440 445 450

Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro
455 460 465

Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val
470 475 480

Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His
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<210> 55

<211> 644

<212> DNA

<213> Homo Sapien

<400> 55

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cagtagcaca ggatgagaag tgggttctgt atcttggatgtt gtggaatctt 500

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<210> 56
<211> 77
<212> PRT
<213> Homo Sapien
<400> 56

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	20							25					30	
Cys	Ser	Ala	Phe	Trp	Trp	His	Asn	Lys	Gly	Leu	Ala	Leu	Ile	Phe
	35							40					45	
Cys	Ile	Leu	Gln	Ser	Leu	Ala	Leu	Thr	Trp	Tyr	Ser	Leu	Ser	Phe
	50						55					60		
Ile	Pro	Phe	Ala	Arg	Asp	Ala	Val	Lys	Lys	Cys	Phe	Ala	Val	Cys
	65							70				75		

Leu Ala

<210> 57
<211> 3334
<212> DNA
<213> Homo Sapien

<400> 57

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ccc当地 cttcc当地 tttgagtc当地 agggc当地 tgccgagctg 150
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ctaccgc当地 tggaagc当地 aaattgtaca agctggagat aaggacctt当地 250
atggc当地 agactttgaa gaatttgcc attatctcca agatcatgag 300
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tatctgaaca gc当地 gagc当地 aaaattctca agagcatgga taaaaacggc 450
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<210> 58
<211> 469
<212> PRT
<213> Homo Sapien

<400> 58
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Lys Ser Ile Phe Lys	Leu Ser Val Phe Ile Pro	Ser Gln Glu	Phe
35	40	45	
Ser Thr Tyr Arg Gln Trp	Lys Gln Ile Val Gln Ala	Gly Asp	
50	55	60	
Lys Asp Leu Asp Gly	Gln Leu Asp Phe Glu	Glu Phe Val His	Tyr
65	70	75	
Leu Gln Asp His Gln	Glu Lys Leu Arg Leu Val	Phe Lys Ile Leu	
80	85	90	
Asp Lys Lys Asn Asp Gly	Arg Ile Asp Ala Gln	Glu Ile Met Gln	
95	100	105	
Ser Leu Arg Asp Leu Gly	Val Lys Ile Ser Glu Gln	Gln Ala Glu	
110	115	120	
Lys Ile Leu Lys Ser Met	Asp Lys Asn Gly	Thr Met Thr Ile Asp	
125	130	135	
Trp Asn Glu Trp Arg Asp	Tyr His Leu Leu His	Pro Val Glu Asn	
140	145	150	
Ile Pro Glu Ile Ile	Leu Tyr Trp Lys His	Ser Thr Ile Phe Asp	
155	160	165	
Val Gly Glu Asn Leu	Thr Val Pro Asp Glu	Phe Thr Val Glu Glu	
170	175	180	
Arg Gln Thr Gly Met	Trp Trp Arg His Leu	Val Ala Gly Gly	Gly
185	190	195	
Ala Gly Ala Val Ser	Arg Thr Cys Thr Ala	Pro Leu Asp Arg	Leu
200	205	210	
Lys Val Leu Met Gln	Val His Ala Ser Arg	Ser Asn Asn Met	Gly
215	220	225	
Ile Val Gly Gly Phe	Thr Gln Met Ile Arg	Glu Gly Gly Ala	Arg
230	235	240	
Ser Leu Trp Arg Gly	Asn Gly Ile Asn Val	Leu Lys Ile Ala	Pro
245	250	255	
Glu Ser Ala Ile Lys	Phe Met Ala Tyr Glu	Gln Ile Lys Arg	Leu
260	265	270	
Val Gly Ser Asp Gln	Glu Thr Leu Arg Ile	His Glu Arg Leu	Val
275	280	285	
Ala Gly Ser Leu Ala	Gly Ala Ile Ala Gln	Ser Ser Ile Tyr	Pro

	290	295	300
Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln			
305	310	315	
Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu			
320	325	330	
Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly			
335	340	345	
Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu			
350	355	360	
Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro			
365	370	375	
Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys			
380	385	390	
Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met			
395	400	405	
Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser			
410	415	420	
Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu			
425	430	435	
Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val			
440	445	450	
Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly			
455	460	465	
Val Gln Ser Arg			

<210> 59
<211> 1658
<212> DNA
<213> Homo Sapien

<400> 59
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cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
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ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaaa 1658

<210> 60
<211> 282

<212> PRT

<213> Homo Sapien

<400> 60

Met	Ala	Ser	Leu	Gly	Gln	Ile	Leu	Phe	Trp	Ser	Ile	Ile	Ser	Ile
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Ile	Ile	Ile	Leu	Ala	Gly	Ala	Ile	Ala	Leu	Ile	Ile	Gly	Phe	Gly
	20						25						30	
Ile	Ser	Gly	Arg	His	Ser	Ile	Thr	Val	Thr	Thr	Val	Ala	Ser	Ala
	35						40						45	
Gly	Asn	Ile	Gly	Glu	Asp	Gly	Ile	Leu	Ser	Cys	Thr	Phe	Glu	Pro
	50						55						60	
Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly
	65						70						75	
Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu
	80						85						90	
Ser	Glu	Gln	Asp	Glu	Met	Phe	Arg	Gly	Arg	Thr	Ala	Val	Phe	Ala
	95						100						105	
Asp	Gln	Val	Ile	Val	Gly	Asn	Ala	Ser	Leu	Arg	Leu	Lys	Asn	Val
	110						115						120	
Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser
	125						130						135	
Lys	Gly	Lys	Gly	Asn	Ala	Asn	Leu	Glu	Tyr	Lys	Thr	Gly	Ala	Phe
	140						145						150	
Ser	Met	Pro	Glu	Val	Asn	Val	Asp	Tyr	Asn	Ala	Ser	Ser	Glu	Thr
	155						160						165	
Leu	Arg	Cys	Glu	Ala	Pro	Arg	Trp	Phe	Pro	Gln	Pro	Thr	Val	Val
	170						175						180	
Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser
	185						190						195	
Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val
	200						205						210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys
	215						220						225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val
	230						235						240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn
	245						250						255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp
	260						265						270	

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
275 280

<210> 61
<211> 1617
<212> DNA
<213> Homo Sapien

<400> 61
tgacgtcaga atcaccatgg ccagctatcc ttacccgcag ggctgcccag 50
gagctgcagg acaagcacca ggagcccttc cggtagcta ctaccctgga 100
ccccccaata gtggagggca gtatggtagt gggctacccc ctggtgtgg 150
ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtgag 200
ggccctatgg acaccccaat cctggatgt tcccctctgg aactccagga 250
gaccatatg gcggtgca cccgggggc ccctatggc agccaccc 300
aagttcctac ggtgcccagc agcctggct ttatggacag ggtggcgccc 350
ctcccaatgt ggatccttag gcctactcct ggtccagtc ggtggactca 400
gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctggcaa 450
ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
tgtttgacaa gaccaagtca ggccgcacatcg atgtctacgg cttctcagcc 550
ctgtggaaat tcattccagca gtggaaagaac ctcttccagc agtatgaccg 600
ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
aaatgggcta caacctgagc cccagttca cccagcttct ggtctccgc 700
tactgcccac gctctgccaa tcctgccatg cagcttgacc gcttcatcca 750
ggtgtgcacc cagctgcagg tgctgacaga ggccttcgg gagaaggaca 800
cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
acagcttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
cagggacctt tcctggcttc ttagagttag agaagtatgt ggacatctct 950
tctttcctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
gttccaaaag agggtggaga gtcctgcacatc atagccacca aatagtgagg 1050
accggggctg aggcacacaca gataggggcc tggatggagga gaggatagaa 1100
gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
ggagcaggc cttgtaatgg agttagtgac cagtcagctg agctccaccc 1200

tgatgccagt ggtgagtggtt catcggcctg ttaccgttag tacctgtgtt 1250
ccctcaccag gccatcctgt caaacgagcc cattttctcc aaagtggaaat 1300
ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
gccacaccca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
cctgctcaga caaatctgct ccctggcat ctttggccag gcttctgccc 1450
cctgcagctg ggaccctca cttgcctgcc atgctctgct cggttcagt 1500
ctccaggaga cagtggcac ctctccctgc caatactttt tttaatttgc 1550
attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
aaaggatgaa actctga 1617

<210> 62

<211> 284

<212> PRT

<213> Homo Sapien

<400> 62

Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
1 5 10 15

Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
20 25 30

Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
35 40 45

Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
50 55 60

Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
65 70 75

Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr
80 85 90

Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu
95 100 105

Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr
110 115 120

Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser
125 130 135

Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser
140 145 150

Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys
155 160 165

Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly Phe Ser Ala Leu Trp
170 175 180

Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln Gln Tyr Asp Arg
185 190 195

Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln Gln Ala Leu
200 205 210

Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu
215 220 225

Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu
230 235 240

Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu
245 250 255

Ala Phe Arg Glu Lys Asp Thr Ala Val Gln Gly Asn Ile Arg Leu
260 265 270

Ser Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu
275 280

<210> 63
<211> 1234
<212> DNA
<213> Homo Sapien

<400> 63
caggatgcag ggccgcgtgg cagggagctg cgctcctctg ggcctgctcc 50
tggctgtct tcatactccca ggcctcttg cccggagcat cggtgttgg 100
gaggagaag tttcccaaaa ctgcggacc aactgcctc agtcggaca 150
accccccacttcc actggccct ctaactctga acatccgcag cccgctctgg 200
acccttaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250
ccatcagatg gctccccacc tgcaggaggt tctgcagtgc agaggtggcc 300
tccatcggtgg gggctgcctg ccatggattc ctggcccccct gaggatcctt 350
ggcagatgat ggctgctgcg gctgaggacc gcctggggaa agcgctgcct 400
gaagaactct cttacctctc cagtgcgtcg gccctcgctc cgggcagtgg 450
ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacacctgagg 500
cttcactctt ccaccaggac tcggagttca gacgactgcc ccgttctaatt 550
tcactgggag ccggggaaa aatccttcc caacgcctc cctgggtctct 600
catccacagg gttctgcctg atcacccctg ggttaccctg aatcccagtg 650
tgtcctgggg aggtggaggc cctgggactg gttggggAAC gagggccatg 700

ccacaccctg aggaaatctg gggtatcaat aatcaacccc caggtaccag 750
ctggggaaat attaatcggt atccaggagg cagctgggga aatattaatc 800
gttatccagg aggtagtgg gggatatta atcggtatcc aggaggcagc 850
tggggaaata ttcatctata cccaggtatc aataacccat ttcctcctgg 900
agttctccgc ctcctggct ctcttgaa catccagct ggctcccta 950
atcctccaag ccctaggtt cagtgggct agagcacat agagggaaac 1000
ccaacattgg gagtttagt cctgctccg ccccttgctg tgtggctca 1050
atccaggccc tgttaacatg tttccagcac tatccccact tttcagtgcc 1100
tccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
<211> 325
<212> PRT
<213> Homo Sapien

<400> 64
Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
1 5 10 15

Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
20 25 30

Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
35 40 45
Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
50 55 60

Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
65 70 75

Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
80 85 90

Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
95 100 105

Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
110 115 120

Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
125 130 135

Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
140 145 150

Leu Pro Gly Glu Ser Ser Pro Asp Ala Thr Gly Leu Ser Pro Glu
155 160 165

Ala Ser Leu Leu His Gln Asp Ser Glu Ser Arg Arg Leu Pro Arg
170 175 180

Ser Asn Ser Leu Gly Ala Gly Gly Lys Ile Leu Ser Gln Arg Pro
185 190 195

Pro Trp Ser Leu Ile His Arg Val Leu Pro Asp His Pro Trp Gly
200 205 210

Thr Leu Asn Pro Ser Val Ser Trp Gly Gly Gly Pro Gly Thr
215 220 225

Gly Trp Gly Thr Arg Pro Met Pro His Pro Glu Gly Ile Trp Gly
230 235 240

Ile Asn Asn Gln Pro Pro Gly Thr Ser Trp Gly Asn Ile Asn Arg
245 250 255

Tyr Pro Gly Gly Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly
260 265 270

Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly Ser Trp Gly Asn
275 280 285

Ile His Leu Tyr Pro Gly Ile Asn Asn Pro Phe Pro Pro Gly Val
290 295 300

Leu Arg Pro Pro Gly Ser Ser Trp Asn Ile Pro Ala Gly Phe Pro
305 310 315

Asn Pro Pro Ser Pro Arg Leu Gln Trp Gly
320 325

<210> 65
<211> 422
<212> DNA
<213> Homo Sapien

<400> 65
aaggagagc caccggact tcagtgtctc ctccatccca ggagcgca 50
ggccactatg gggctctgggc tgccccttgt ctcctcttg accctcctt 100
gcagctcaca tggAACAGGG ccgggtatga ctttgcact gaagctgaag 150
gagtctttc tgacaaattc ctcctatgag tccagcttcc tggaattgct 200
tgaaaagctc tgcctcctcc tccatctccc ttcaGGGACC agcgtcaccc 250
tccaccatgc aagatctcaa caccatgttgc tctgcaacac atgacagcca 300
ttgaAGCCTG tgtccttctt ggCCCGGGCT tttggGCCGG ggatgcagga 350
ggcaggcccc gaccctgtct ttcagcaggc cccCACCTC ctgagttggca 400

ataaaataaaa ttcggtatgc tg 422

<210> 66

<211> 78

<212> PRT

<213> Homo Sapien

<400> 66

Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
1 5 10 15

Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
20 25 30

Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
35 40 45

Glu Leu Leu Glu Lys Leu Cys Leu Leu His Leu Pro Ser Gly
50 55 60

Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
65 70 75

Cys Asn Thr

<210> 67

<211> 744

<212> DNA

<213> Homo Sapien

<400> 67

acggaccgag ggttcgaggg agggacacgg accaggaacc tgagcttaggt 50

caaagacgcc cgggccaggt gccccgtcgc aggtgcccct ggccggagat 100

gcggtaggag gggcgagcgc gagaagcccc ttccctggcg ctgccaaccc 150

gccacccagc ccatggcgaa cccccggctg gggctgcttc tggcgctggg 200

cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250
ccacttctgc aaatgagaat agcaactgtt tgccttcatc caccagctcc 300

agctccgatg gcaacctgcg tccggaagcc atcaactgcta tcatcggtt 350

cttctccctc ttggctgcct tgctcctggc tgtggggctg gcactgtttt 400

tgcggaagct tcgggagaag cgccagacgg agggcaccta ccggcccaagt 450

agcgaggagc agttctccca tgcagccgag gcccgggccc ctcaggactc 500

caaggagacg gtgcagggtt gcctgcccattt ctaggtcccc tctcctgtat 550

ctgtctccct tcattgtgt gtgaccttgg ggaaaggcag tgccctctct 600

ggcagtcag atccacccag tgcttaatag cagggaaagaa ggtacttcaa 650

agactctgcc cctgaggta agagaggatg gggctattca cttttatata 700
tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68
<211> 123
<212> PRT
<213> Homo Sapien

<400> 68
Met Ala Asn Pro Gly Leu Gly Leu Leu Leu Ala Leu Gly Leu Pro
1 5 10 15

Phe Leu Leu Ala Arg Trp Gly Arg Ala Trp Gly Gln Ile Gln Thr
20 25 30

Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
35 40 45

Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
50 55 60

Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
65 70 75

Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
80 85 90

Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
110 115 120

Leu Pro Ile

<210> 69
<211> 3265
<212> DNA
<213> Homo Sapien

<400> 69
gccaggaata actagagagg aacaatgggg ttattcagag gttttgtttt 50
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcatthaagc 100
tgaataataa tggcttgaa gatattgtca ttgttataga tcctagtgtg 150
ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200
ttctacgtac ctgtttgaag ccacagaaaa aagattttt ttcaaaaatg 250
tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300
ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
agaaaaggcga atacattcac ttcacccctg accttctact tggaaaaaaa 450
caaaatgaat atggaccacc aggcaaactg tttgtccatg agtgggctca 500
cctccggtgttgg ggagtgtttg atgagtacaa tgaagatcag cctttctacc 550
gtgctaagtc aaaaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
ggttagaaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650
atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700
ttcctgataa agtacaaaca gaaaaagcat ccataatgtt tatgcaaagt 750
attgattctg ttgttgaatt ttgttaacgaa aaaacccata atcaagaagc 800
tccaaggccta caaaacataa agtgcaattt tagaagtaca tgggagggtga 850
ttagcaattc tgaggatttt aaaaacacca tacccatggt gacaccacct 900
cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950
agttcttcat aagtctggaa gcatgggggg taaggaccgc ctaaatcgaa 1000
tgaatcaagc agcaaaacat ttcctgctgc agactgttga aaatggatcc 1050
tgggtgggga tggttcactt tgatagtact gccactattg taaataagct 1100
aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150
ctacatatcc tctggagga acttccatct gctctggaaat taaatatgca 1200
tttcagggtga ttggagagct acattcccaa ctgcgtggat ccgaagttact 1250
gctgctgact gatggggagg ataacactgc aagttcttgtt attgatgaag 1300
tgaaacaaag tggggccatt gttcattttt ttgtttggg aagagctgct 1350
gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttt 1400
tgtttcagat gaagctcaga acaatggcct cattgtatgt tttggggctc 1450
ttacatcagg aaatactgat ctctcccaga agtcccttca gctcgaaagt 1500
aagggattaa cactgaatag taatgcctgg atgaacgaca ctgtcataat 1550
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tgcctccag tatttctctc tggatccca gtggAACAAAT 1650
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tgcaaagggtg ggcacttggg catacaatct tcaagccaaa gcgaacccag 1750
aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgcct 1800

ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttccccag 1850
cccaatgatt gttacgcag aaattctaca aggatatgtc cctgttcttg 1900
gagccaatgt gactgcttc attgaatcac agaatggaca tacagaagtt 1950
ttggaacttt tggataatgg tgcaggcgct gattcttca agaatgatgg 2000
agtctactcc aggtatTTTA cagcatatac agaaaatggc agatatacg 2050
taaaagttcg ggctcatgga ggagcaaaca ctgccaggot aaaattacgg 2100
cctccactga atagagccgc gtacatacca ggctggtag tgaacgggga 2150
aattgaagca aacccgccaa gacctgaaat tgatgaggat actcagacca 2200
ccttggagga ttTCAGCCGA acagcatccg gaggtgcatt tgtggtatca 2250
caagtcccaa gcctccctt gcctgaccaa tacccaccaa gtcaaATCAC 2300
agacCTTgat gccacAGTTC atgaggataa gattattctt acatggacag 2350
caccaggaga taattttgat gttggaaaag ttcaacgtta tatcataaga 2400
ataagtgcaa gtattcttga tctaagagac agtttgatg atgctttca 2450
agtaaaatact actgatctgt caccaaaagga ggccaactcc aaggaaagct 2500
ttgcatttaa accagaaaat atctcagaag aaaatgcaac ccacatattt 2550
attGCCATTA aaagtataga taaaagcaat ttgacatcaa aagtatccaa 2600
cattgcacaa gtaactttgt ttatCCTCA agcaaATCCT gatgacattt 2650
atcctacacc tactcctact cctactccta ctcctgataa aagtataat 2700
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aattgttaac ttTATTttaa gtaccacca ttgaacctt aCGAAGAAAA 2800
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gtaaaggata ttTCTGAATC taaaattca tcccatgtgt gatcataaac 2900
tcataaaaaat aattttaaaga tgTCGGAAAA ggatactttt attaaataaa 2950
aacactcatg gatatgtaaa aactgtcaag attaaaattt aatagttca 3000
tttattttgtt attttatTTG taagaaatag tgatgaacaa agatccttt 3050
tcataactgat acctgggtgt atatttttg atgcaacagt ttTCTGAAAT 3100
gatatttcaa attgcataa gaaattaaaa tcatactatct gagtagtcaa 3150
aatacaagta aaggagagca aataaacaac atttgaaaaaaa aaaaaaaaaa 3200

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 3250

aaaaaaaaaaa aaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met Gly Leu Phe Arg Gly Phe Val Phe Leu Leu Val Leu Cys Leu
1 5 10 15

Leu His Gln Ser Asn Thr Ser Phe Ile Lys Leu Asn Asn Asn Gly
20 25 30

Phe Glu Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp
35 40 45

Glu Lys Ile Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser
50 55 60

Thr Tyr Leu Phe Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn
65 70 75

Val Ser Ile Leu Ile Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr
80 85 90

Lys Arg Pro Lys His Glu Asn His Lys His Ala Asp Val Ile Val
95 100 105

Ala Pro Pro Thr Leu Pro Gly Arg Asp Glu Pro Tyr Thr Lys Gln
110 115 120

Phe Thr Glu Cys Gly Glu Lys Gly Glu Tyr Ile His Phe Thr Pro
125 130 135

Asp Leu Leu Leu Gly Lys Lys Gln Asn Glu Tyr Gly Pro Pro Gly
140 145 150

Lys Leu Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe
155 160 165

Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg Ala Lys Ser Lys
170 175 180

Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser Gly Arg Asn
185 190 195

Arg Val Tyr Lys Cys Gln Gly Ser Cys Leu Ser Arg Ala Cys
200 205 210

Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln Phe
215 220 225

Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met
230 235 240

Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His
245 250 255

Asn Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg
260 265 270

Ser Thr Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr
275 280 285

Ile Pro Met Val Thr Pro Pro Pro Pro Val Phe Ser Leu Leu
290 295 300

Lys Ile Ser Gln Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly
305 310 315

Ser Met Gly Gly Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala
320 325 330

Lys His Phe Leu Leu Gln Thr Val Glu Asn Gly Ser Trp. Val Gly
335 340 345

Met Val His Phe Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile
350 355 360

Gln Ile Lys Ser Ser Asp Glu Arg Asn Thr Leu Met Ala Gly Leu
365 370 375

Pro Thr Tyr Pro Leu Gly Gly Thr Ser Ile Cys Ser Gly Ile Lys
380 385 390

Tyr Ala Phe Gln Val Ile Gly Glu Leu His Ser Gln Leu Asp Gly
395 400 405

Ser Glu Val Leu Leu Thr Asp Gly Glu Asp Asn Thr Ala Ser
410 415 420

Ser Cys Ile Asp Glu Val Lys Gln Ser Gly Ala Ile Val His Phe
425 430 435

Ile Ala Leu Gly Arg Ala Ala Asp Glu Ala Val Ile Glu Met Ser
440 445 450

Lys Ile Thr Gly Gly Ser His Phe Tyr Val Ser Asp Glu Ala Gln
455 460 465

Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Thr Ser Gly Asn
470 475 480

Thr Asp Leu Ser Gln Lys Ser Leu Gln Leu Glu Ser Lys Gly Leu
485 490 495

Thr Leu Asn Ser Asn Ala Trp Met Asn Asp Thr Val Ile Ile Asp
500 505 510

Ser Thr Val Gly Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn Ser
515 520 525

Leu Pro Pro Ser Ile Ser Leu Trp Asp Pro Ser Gly Thr Ile Met
530 535 540

Glu Asn Phe Thr Val Asp Ala Thr Ser Lys Met Ala Tyr Leu Ser
545 550 555

Ile Pro Gly Thr Ala Lys Val Gly Thr Trp Ala Tyr Asn Leu Gln
560 565 570

Ala Lys Ala Asn Pro Glu Thr Leu Thr Ile Thr Val Thr Ser Arg
575 580 585

Ala Ala Asn Ser Ser Val Pro Pro Ile Thr Val Asn Ala Lys Met
590 595 600

Asn Lys Asp Val Asn Ser Phe Pro Ser Pro Met Ile Val Tyr Ala
605 610 615

Glu Ile Leu Gln Gly Tyr Val Pro Val Leu Gly Ala Asn Val Thr
620 625 630

Ala Phe Ile Glu Ser Gln Asn Gly His Thr Glu Val Leu Glu Leu
635 640 645

Leu Asp Asn Gly Ala Gly Ala Asp Ser Phe Lys Asn Asp Gly Val
650 655 660

Tyr Ser Arg Tyr Phe Thr Ala Tyr Thr Glu Asn Gly Arg Tyr Ser
665 670 675

Leu Lys Val Arg Ala His Gly Gly Ala Asn Thr Ala Arg Leu Lys
680 685 690

Leu Arg Pro Pro Leu Asn Arg Ala Ala Tyr Ile Pro Gly Trp Val
695 700 705

Val Asn Gly Glu Ile Glu Ala Asn Pro Pro Arg Pro Glu Ile Asp
710 715 720

Glu Asp Thr Gln Thr Thr Leu Glu Asp Phe Ser Arg Thr Ala Ser
725 730 735

Gly Gly Ala Phe Val Val Ser Gln Val Pro Ser Leu Pro Leu Pro
740 745 750

Asp Gln Tyr Pro Pro Ser Gln Ile Thr Asp Leu Asp Ala Thr Val
755 760 765

His Glu Asp Lys Ile Ile Leu Thr Trp Thr Ala Pro Gly Asp Asn
770 775 780

Phe Asp Val Gly Lys Val Gln Arg Tyr Ile Ile Arg Ile Ser Ala
785 790 795

Ser Ile Leu Asp Leu Arg Asp Ser Phe Asp Asp Ala Leu Gln Val
800 805 810

Asn Thr Thr Asp Leu Ser Pro Lys Glu Ala Asn Ser Lys Glu Ser
815 820 825

Phe Ala Phe Lys Pro Glu Asn Ile Ser Glu Glu Asn Ala Thr His
830 835 840

Ile Phe Ile Ala Ile Lys Ser Ile Asp Lys Ser Asn Leu Thr Ser
845 850 855

Lys Val Ser Asn Ile Ala Gln Val Thr Leu Phe Ile Pro Gln Ala
860 865 870

Asn Pro Asp Asp Ile Asp Pro Thr Pro Thr Pro Thr Pro Thr Pro
875 880 885

Thr Pro Asp Lys Ser His Asn Ser Gly Val Asn Ile Ser Thr Leu
890 895 900

Val Leu Ser Val Ile Gly Ser Val Val Ile Val Asn Phe Ile Leu
905 910 915

Ser Thr Thr Ile

<210> 71
<211> 3877
<212> DNA
<213> Homo Sapien

<400> 71
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<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val
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Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr
20 25 30

Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu
35 40 45

Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
50 55 60

Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
65 70 75

Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
80 85 90

Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
95 100 105

Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
110 115 120

Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
125 130 135

Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
140 145 150

Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
155 160 165

His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
170 175 180

Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala

185 190 195
Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp Phe Ile
200 205 210
Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr Glu
215 220 225
Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile
230 235 240
Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys
245 250 255
Leu Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala
260 265 270
Lys Arg Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu
275 280 285
Met Cys Ile Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr
290 295 300
Phe Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn
305 310 315
Thr Ser Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu
320 325 330
Asn Gly Glu Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg
335 340 345
Phe Trp Lys Gly Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp
350 355 360
Ile Tyr Phe Thr Ser Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr
365 370 375
Gln Pro Gly Lys Lys Val Phe Tyr Pro Val Leu Phe Ser Gln Tyr
380 385 390
Asn Pro Gly Ile Ile Tyr Gly His His Asp Ala Val Pro Pro Leu
395 400 405
Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly Phe Trp Arg Asp
410 415 420
Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Ile Asn
425 430 435
Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly Glu Asp
440 445 450
Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val Val
455 460 465
Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg

	470	475	480
Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln			
	485	490	495
Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu			
	500	505	510
Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln			
	515	520	525
Lys Thr Ser Ser Lys Lys Thr			
	530		

<210> 73
<211> 1701
<212> DNA
<213> Homo Sapien
<220>
<221> unsure
<222> 1528
<223> unknown base

<400> 73
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gcaccccttc ctggacact atgttgttcc ccccccctc gctggaggtg 300
atttggatcc tggctgcaga tgggggtcaa cactggacgt atgagggccc 350
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t 1701

<210> 74
<211> 337
<212> PRT
<213> Homo Sapien

<400> 74
Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
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Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
20 25 30

Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
35 40 45

Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
50 55 60

Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
65 70 75

Pro	Leu	Asp	Leu	His	Asn	Asn	Gly	His	Thr	Val	Gln	Leu	Ser	Leu
														90
80														
95														
Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala
														105
95														
110														
115														
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly
														120
110														
125														
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His
														135
125														
140														
145														
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala
														150
140														
155														
160														
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu
														165
155														
170														
175														
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His
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170														
185														
Phe	Asn	Leu	Arg	Glu	Leu	Leu	Pro	Lys	Gln	Leu	Gly	Gln	Tyr	Phe
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205														
Arg	Tyr	Asn	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Tyr	Gln	Ser	Val
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215														
220														
Leu	Trp	Thr	Val	Phe	Tyr	Arg	Ser	Gln	Ile	Ser	Met	Glu	Gln	
														240
230														
235														
Leu	Glu	Lys	Leu	Gln	Gly	Thr	Leu	Phe	Ser	Thr	Glu	Glu	Glu	Pro
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245														
250														
Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn
														270
260														
265														
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr
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275														
280														
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly
														300
290														
295														
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile
														315
305														
310														
Arg	Lys	Lys	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Val	Val	Phe	Thr	Ser
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320														
325														
Ala	Gln	Ala	Thr	Thr	Glu	Ala								
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<210> 75

<211> 1743

<212> DNA

<213> Homo Sapien

<400> 75

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aaatgttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76
<211> 442
<212> PRT
<213> Homo Sapien

<400> 76

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Leu	Leu	Thr	Leu	Cys	Ser	Ile	Ser	Ser	Gln	Ile	Gly	Pro	Pro	Glu
				20					25				30	
Val	Ala	Leu	Thr	Thr	Asp	Glu	Lys	Ser	Ile	Ser	Val	Val	Leu	Thr
					35				40				45	
Ala	Pro	Glu	Lys	Trp	Lys	Arg	Asn	Pro	Glu	Asp	Leu	Pro	Val	Ser
				50				55				60		
Met	Gln	Gln	Ile	Tyr	Ser	Asn	Leu	Lys	Tyr	Asn	Val	Ser	Val	Leu
				65				70				75		
Asn	Thr	Lys	Ser	Asn	Arg	Thr	Trp	Ser	Gln	Cys	Val	Thr	Asn	His
				80				85				90		
Thr	Leu	Val	Leu	Thr	Trp	Leu	Glu	Pro	Asn	Thr	Leu	Tyr	Cys	Val
				95				100				105		
His	Val	Glu	Ser	Phe	Val	Pro	Gly	Pro	Pro	Arg	Arg	Ala	Gln	Pro
				110				115				120		
Ser	Glu	Lys	Gln	Cys	Ala	Arg	Thr	Leu	Lys	Asp	Gln	Ser	Ser	Glu
				125				130				135		
Phe	Lys	Ala	Lys	Ile	Ile	Phe	Trp	Tyr	Val	Leu	Pro	Ile	Ser	Ile
				140				145				150		
Thr	Val	Phe	Leu	Phe	Ser	Val	Met	Gly	Tyr	Ser	Ile	Tyr	Arg	Tyr
				155				160				165		
Ile	His	Val	Gly	Lys	Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile
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Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys
185 190 195

Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys
200 205 210

Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val
215 220 225

Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro
230 235 240

Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu
245 250 255

Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser
260 265 270

Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys
275 280 285

Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys
290 295 300

Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser
305 310 315

Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu
320 325 330

Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp
335 340 345

Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro
350 355 360

Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr
365 370 375

Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser
380 385 390

Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly
395 400 405

Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro
410 415 420

Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly
425 430 435

Leu Tyr Val Gln Met Glu Asn
440

<210> 77
<211> 1636
<212> DNA

<213> Homo Sapien

<400> 77

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ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtcccac 150
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gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctggtcaa 450
gaccatcgtg gagttccaca tgacgactga ggcccaagcc accatccgca 500
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cactgagatc atccactcca tcctgctgcc gaaccagaat ggcaaattaa 1400

gatctgggt cccagtgtca ttggtaagg cttggatt cgaggcagct 1450
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cctctctgca atcaataaac acttgcctgt gaaaaa 1636

<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
1 5 10 15

Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
20 25 30

Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
35 40 45

Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60

Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75

Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90

Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105

Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120

Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150

Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165

Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180

Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195

Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

200 205 210
Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu
215 220 225
Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys
230 235 240
Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser
245 250 255
Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu
260 265 270
Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser
275 280 285
Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu
290 295 300
Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His
305 310 315
Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp
320 325 330
Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr
335 340 345
Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu
350 355 360
Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu
365 370 375
Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr
380 385 390
Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp
395 400 405
Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp
410 415 420
Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu
425 430 435
Pro Asn Gln Asn Gly Lys Leu Arg Ser Gly Val Pro Val Ser Leu
440 445 450
Val Lys Ala Leu Gly Phe Glu Ala Ala Glu Ser Ser Leu Thr Lys
455 460 465
Asp Ala Leu Val Leu Thr Pro Ala Ser Leu Trp Lys Pro Ser Ser
470 475 480
Pro Val Ser Gln

<210> 79
<211> 1475
<212> DNA
<213> Homo Sapien

<400> 79
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ctacatccta ggccttctgg ggctttggg cacactggtt gccatgctgc 200
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gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
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gagaagcagt ggctttgtg ggcattgctc taacctactt ctcaggatcc 1300
cctccaaaga aactgattgg ccctggaacc tccatcccac tcttgatcg 1350
actccacagt gtccagacta atttgtcat gaactgaaat aaaaccatcc 1400
tacggtatcc agggAACAGA aagcaggatg caggatggga ggacagggaa 1450
gcagcctggg acattaaaa aaata 1475

<210> 80
<211> 230
<212> PRT
<213> Homo Sapien

<400> 80
Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu
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Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
20 25 30
Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
35 40 45
Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
50 55 60
Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
65 70 75
Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
80 85 90
Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
95 100 105
Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
110 115 120 ..
Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
125 130 135
Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150
Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165
Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180
Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195
Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
215 220 225

Leu Thr Gly Tyr Val
230

<210> 81
<211> 1732
<212> DNA
<213> Homo Sapien

<400> 81
cccacgcgtc cgccctctc cttctgctg gacccctt cgtctctcca 50
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cttctccga ccccgctcta gcagcagacc tcctgggtc tgtgggtga 200
tctgtggccc ctgtgcctcc gtgtccttt cgtctccctt cttcccgact 250
ccgctcccg accagcggcc tgaccctgg gaaaggatgg ttcccggaggt 300
gagggtcctc tcctccttgc tggactcgc gtcgtctgg ttccccctgg 350
actcccacgc tcgagccgc ccagacatgt tctgcctttt ccatggaaag 400
agataactccc ccggcgagag ctggcacccc tacttgagc cacaaggcct 450
gtgtactgc ctgcgtgtc cctgctcaga gggcgccat gtgagttgtt 500
accgcctcca ctgtccgcct gtccactgcc cccagcctgt gacggagcca 550
cagcaatgtc gtcccaagtg tgtggaacct cacactccct ctggactccg 600
ggccccacca aagtccctgcc agcacaacgg gaccatgtac caacacggag 650
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aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
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tgggagaaag agaggcccg gcaccccagc cccactggc ctcagcgtcc 950
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tcggccccctt gccctgcatc ctatgcacct gtgaggatgg cgcggaggac 1150

tgccagcgta tgacctgtcc caccgagta cccctggcgtc acccccagaa 1200
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gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
ctcggtccaca catcggtatc cccaagccca gacaacctgc gtgcgttgc 1350
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taaaAGATGA ggAAACTGAG gctcAGAGAG gtGAAGTACC tggCCCAAGG 1450
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aagacttCCA gaaAGAGGCa cagcacttcc gactgctcgc tggCCCCAC 1550
gaaggTCact ggaacgtctt cctagCCAG accCTGGAGC tgaaggTCAC 1600
ggCCAGTCCA gacAAAGTGA ccaAGACATA acaaAGACCT aacAGTTGCA 1650
gatATGAGCT gtataATTGT tgTTATTATA tattaATAAA taagaAGTTG 1700
cattaccctc aaaaaaaaaaaaaaa aa 1732

<210> 82
<211> 451
<212> PRT
<213> Homo Sapien

<400> 82
Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
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Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
20 25 30
Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
35 40 45
Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
50 55 60
Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
65 70 75
Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
80 85 90
Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
95 100 105
Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
110 115 120
Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
125 130 135

Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys
140 145 150

Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro
155 160 165

Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu
170 175 180

Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg
185 190 195

His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly
200 205 210

Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe
215 220 225

Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val
230 235 240

Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His Gly
245 250 255

Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
260 265 270

Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly
275 280 285

Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys
290 295 300

Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
305 310 315

Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg
320 325 330

Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
335 340 345

Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala
350 355 360

Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu
365 370 375

Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His
380 385 390

Ser Gln Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala
395 400 405

Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro
410 415 420

Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala
425 430 435

Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
440 445 450

Thr

<210> 83

<211> 2052

<212> DNA

<213> Homo Sapien

<400> 83

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gttctcccttct tctctctaatt ccatccgtca cctctcctgt catccgtttc 150
catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
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gccagacaag cctgtccagg cttgggtggg ggaggacgca gcattctcct 300
gtttcctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350
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ccacctctca ggtgaagaac cgtaggaat tcccatctca caggctgtgg 1950
tgttagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000
acagagtgtta tcctaattgtt ttgttcatta tattacactt tcagaaaaaa 2050
aa 2052

<210> 84
<211> 500
<212> PRT
<213> Homo Sapien

<400> 84
Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly
1 5 10 15
Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
20 25 30
Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
35 40 45
Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe

	50	55	60
Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe			
65	70	75	
Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp			
80	85	90	
Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr			
95	100	105	
Val Leu Asp Ala Gly Leu Tyr Gly Cys Arg Ile Ser Ser Gln Ser			
110	115	120	
Tyr Tyr Gln Lys Ala Ile Trp Glu Leu Gln Val Ser Ala Leu Gly			
125	130	135	
Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr Val Asp Arg Asp Ile			
140	145	150	
Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro Arg Pro Thr Ala			
155	160	165	
Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr Asp Ser Arg			
170	175	180	
Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile Ser Leu			
185	190	195	
Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg His			
200	205	210	
Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp			
215	220	225	
Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val Leu			
230	235	240	
Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val Gly Leu Lys			
245	250	255	
Ile Phe Phe Ser Lys Phe Gln Trp Lys Ile Gln Ala Glu Leu Asp			
260	265	270	
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys			
275	280	285	
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys			
290	295	300	
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro			
305	310	315	
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val			
320	325	330	
Val Ala Ser Gln Ser Phe Gln Ala Gly Lys His Tyr Trp Glu Val			

	335	340	345
Asp Gly Gly His Asn Lys Arg Trp Arg Val Gly Val Cys Arg Asp			
350	355	360	
Asp Val Asp Arg Arg Lys Glu Tyr Val Thr Leu Ser Pro Asp His			
365	370	375	
Gly Tyr Trp Val Leu Arg Leu Asn Gly Glu His Leu Tyr Phe Thr			
380	385	390	
Leu Asn Pro Arg Phe Ile Ser Val Phe Pro Arg Thr Pro Pro Thr			
395	400	405	
Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe			
410	415	420	
Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg			
425	430	435	
Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn			
440	445	450	
Glu Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu			
455	460	465	
Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu			
470	475	480	
Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu			
485	490	495	
Pro Arg Gly Glu Met			
500			

<210> 85
<211> 1665
<212> DNA
<213> Homo Sapien

<400> 85
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gtaaaactgct gacgatgcag agttccgtga cggtgcagga aggccctgtgt 150
gtccatgtgc cctgctcctt ctcctacccc tcgcatggct ggatttaccc 200
tggcccagta gttcatggct actggttccg ggaaggggcc aatacagacc 250
aggatgctcc agtggccaca aacaacccag ctcggcagt gtgggaggag 300
actcgggacc gattccaccc ccttggggac ccacatacca agaattgcac 350
cctgagcatc agagatgcca gaagaagtga tgcgggaga tacttcttc 400

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caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
accctgatttgggatcaca gccctccag gcaaggaga agtcagaggc 1500
tgattcttgtt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
atgaattatgttgcagagtga aaagcacaca ggcttagag tcaaagtatc 1600
tcaaaccctga atccacactg tgccctccct tttatTTT taactaaaag 1650
acagacaaat tccta 1665

<210> 86
<211> 463
<212> PRT
<213> Homo Sapien

<400> 86
Met Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala
1 5 10 15

Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr
20 25 30

Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr
35 40 45

Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr
50 55 60

Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala
65 70 75
Thr Asn Asn Pro Ala Arg Ala Val Trp Glu Glu Thr Arg Asp Arg
80 85 90

Phe His Leu Leu Gly Asp Pro His Thr Lys Asn Cys Thr Leu Ser
95 100 105

Ile Arg Asp Ala Arg Arg Ser Asp Ala Gly Arg Tyr Phe Phe Arg
110 115 120

Met Glu Lys Gly Ser Ile Lys Trp Asn Tyr Lys His His Arg Leu
125 130 135

Ser Val Asn Val Thr Ala Leu Thr His Arg Pro Asn Ile Leu Ile
140 145 150

Pro Gly Thr Leu Glu Ser Gly Cys Pro Gln Asn Leu Thr Cys Ser
155 160 165

Val Pro Trp Ala Cys Glu Gln Gly Thr Pro Pro Met Ile Ser Trp
170 175 180

Ile Gly Thr Ser Val Ser Pro Leu Asp Pro Ser Thr Thr Arg Ser
185 190 195

Ser Val Leu Thr Leu Ile Pro Gln Pro Gln Asp His Gly Thr Ser
200 205 210

Leu Thr Cys Gln Val Thr Phe Pro Gly Ala Ser Val Thr Thr Asn
215 220 225

Lys Thr Val His Leu Asn Val Ser Tyr Pro Pro Gln Asn Leu Thr
230 235 240

Met Thr Val Phe Gln Gly Asp Gly Thr Val Ser Thr Val Leu Gly
245 250 255

Asn Gly Ser Ser Leu Ser Leu Pro Glu Gly Gln Ser Leu Arg Leu
260 265 270

Val Cys Ala Val Asp Ala Val Asp Ser Asn Pro Pro Ala Arg Leu
275 280 285

Ser Leu Ser Trp Arg Gly Leu Thr Leu Cys Pro Ser Gln Pro Ser
290 295 300

Asn Pro Gly Val Leu Glu Leu Pro Trp Val His Leu Arg Asp Ala
305 310 315

Ala Glu Phe Thr Cys Arg Ala Gln Asn Pro Leu Gly Ser Gln Gln
320 325 330

Val Tyr Leu Asn Val Ser Leu Gln Ser Lys Ala Thr Ser Gly Val
335 340 345

Thr Gln Gly Val Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe
350 355 360

Leu Ser Phe Cys Val Ile Phe Val Val Val Arg Ser Cys Arg Lys
365 370 375

Lys Ser Ala Arg Pro Ala Ala Gly Val Gly Asp Thr Gly Ile Glu ..
380 385 390

Asp Ala Asn Ala Val Arg Gly Ser Ala Ser Gln Gly Pro Leu Thr
395 400 405

Glu Pro Trp Ala Glu Asp Ser Pro Pro Asp Gln Pro Pro Pro Ala
410 415 420

Ser Ala Arg Ser Ser Val Gly Glu Gly Glu Leu Gln Tyr Ala Ser
425 430 435

Leu Ser Phe Gln Met Val Lys Pro Trp Asp Ser Arg Gly Gln Glu
440 445 450

Ala Thr Asp Thr Glu Tyr Ser Glu Ile Lys Ile His Arg
455 460

<210> 87
<211> 1176
<212> DNA
<213> Homo Sapien

<400> 87
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aggagctctc tgtacccaag gaaagtgcag ctgagactca gacaagatta 100
caatgaacca actcagcttc ctgctgttc tcatacgac caccagagga 150
tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
gtctccatct ctgcccagaa gctgcaagga aatcaaagac gaatgtccta 250
gtgcatttga tggcctgtat tttctccgca ctgagaatgg tgttatctac 300
cagaccttct gtgacatgac ctctgggggt ggccggctgga ccctggtggc 350
cagcgtgcat gagaatgaca tgcgtggaa gtgcacggtg ggcgatcgct 400

ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
tggccaact acaacacctt tggatctgca gaggcgcca cgagcgatga 500
ctacaagaac cctggctact acgacatcca gccaaaggac ctgggcatt 550
ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
gtttggcatc taccagaaat atccagtgaa atatggagaa ggaaagtgtt 700
ggactgacaa cggcccggtg atccctgtgg tctatgattt tggcgacgcc 750
cagaaaacag catcttatta ctcaccatat gccagcgaaa aattcactgc 800
gggatttggc cagttcaggg tatttaataa cgagagagca gccaacgcct 850
tgtgtgctgg aatgagggtc accggatgtt acactgagca tcactgcatt 900
ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
ttctggttt gattggagtg gatatggaaac tcattgttggt tacagcagca 1000
gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
tgtggggagg aaccragacc tctcctccca accatgagat cccaaggatg 1100
gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150
taaatcatat tgactcaaga aaaaaa 1176

<210> 88

<211> 313

<212> PRT

<213> Homo Sapien

<400> 88

Met	Asn	Gln	Leu	Ser	Phe	Leu	Leu	Phe	Leu	Ile	Ala	Thr	Thr	Arg
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Gly	Trp	Ser	Thr	Asp	Glu	Ala	Asn	Thr	Tyr	Phe	Lys	Glu	Trp	Thr
					20				25					30

Cys	Ser	Ser	Ser	Pro	Ser	Leu	Pro	Arg	Ser	Cys	Lys	Glu	Ile	Lys
						35			40					45

Asp	Glu	Cys	Pro	Ser	Ala	Phe	Asp	Gly	Leu	Tyr	Phe	Leu	Arg	Thr
					50				55					60

Glu	Asn	Gly	Val	Ile	Tyr	Gln	Thr	Phe	Cys	Asp	Met	Thr	Ser	Gly
						65			70					75

Gly	Gly	Gly	Trp	Thr	Leu	Val	Ala	Ser	Val	His	Glu	Asn	Asp	Met
							80		85					90

Arg	Gly	Lys	Cys	Thr	Val	Gly	Asp	Arg	Trp	Ser	Ser	Gln	Gln	Gly
				95					100					105
Ser	Lys	Ala	Asp	Tyr	Pro	Glu	Gly	Asp	Gly	Asn	Trp	Ala	Asn	Tyr
				110					115					120
Asn	Thr	Phe	Gly	Ser	Ala	Glu	Ala	Ala	Thr	Ser	Asp	Asp	Tyr	Lys
				125					130					135
Asn	Pro	Gly	Tyr	Tyr	Asp	Ile	Gln	Ala	Lys	Asp	Leu	Gly	Ile	Trp
				140					145					150
His	Val	Pro	Asn	Lys	Ser	Pro	Met	Gln	His	Trp	Arg	Asn	Ser	Ser
				155					160					165
Leu	Leu	Arg	Tyr	Arg	Thr	Asp	Thr	Gly	Phe	Leu	Gln	Thr	Leu	Gly
				170					175					180
His	Asn	Leu	Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Gly
				185					190					195
Glu	Gly	Lys	Cys	Trp	Thr	Asp	Asn	Gly	Pro	Val	Ile	Pro	Val	Val
				200					205					210
Tyr	Asp	Phe	Gly	Asp	Ala	Gln	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro
				215					220					225
Tyr	Gly	Gln	Arg	Glu	Phe	Thr	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val
				230					235					240
Phe	Asn	Asn	Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Met	Arg
				245					250					255
Val	Thr	Gly	Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly
				260					265					270
Tyr	Phe	Pro	Glu	Ala	Ser	Pro	Gln	Gln	Cys	Gly	Asp	Phe	Ser	Gly
				275					280					285
Phe	Asp	Trp	Ser	Gly	Tyr	Gly	Thr	His	Val	Gly	Tyr	Ser	Ser	Ser
				290					295					300
Arg	Glu	Ile	Thr	Glu	Ala	Ala	Val	Leu	Leu	Phe	Tyr	Arg		
				305					310					

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

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tccaggcctca gagaccgccc cccttgc(cc cgagggccat gggccgggtc 100

tcagggcttg tgccctctcg ctccctgacg ctccctggcgc atctggtggt 150

cgtcatcacc ttattctggc cccgggacag caacatacag gcctgcctgc 200
ctctcacgtt cacccccgag gagtatgaca agcaggacat tcagctggtg 250
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ggcaaggGCC gcttcgtatt cctggaaAGA ggaaggcata ggcttcggTT 600
ttccccctcgG aaactgcttc tgctggagGA tatgtgttGG aataattacG 650
tcttgagtct gggattatCC gcattgtatt tagtgcttTG taataaaATA 700
tgttttGtag taacattaAG acttatataAC agttttagGG gacaattAAA 750
aaaaaaaa 759

<210> 90
<211> 140
<212> PRT
<213> Homo Sapien

<400> 90
Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu
1 5 10 15
Leu Ala His Leu Val Val Ile Thr Leu Phe Trp Ser Arg Asp
20 25 30
Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
35 40 45
Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
50 55 60
Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
65 70 75
Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
80 85 90
Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
95 100 105
Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
110 115 120
Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu

125

130

135

Lys Lys Lys Pro Phe
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

ctgggacccc gaaaagagaa ggggagagcg aggggacgag agcggaggag 50

gaagatgcaa ctgactcgct gctgcttcgt gttcctggtg cagggttagcc 100

tctatcttgtt catctgtggc caggtatgt gtcctcccg ctcagaggac 150

cctgagcgtg atgaccacga gggccagccc cgccccggg tgcctcgaa 200

gcggggccac atctcaccta agtccccccc catggccaat tccactctcc 250

tagggctgct ggccccgcct ggggaggctt gggcattct tgggcagccc 300

cccaaccgcc cgaaccacag ccccccaccc tcagccaagg tgaagaaaat 350

ctttggctgg ggcgacttct actccaacat caagacggtg gccctgaacc 400

tgctcgtcac agggaaagatt gtggaccatg gcaatggac cttcagcgac 450

cacttccaac acaatgccac aggccaggg aacatctcca tcagcctcg 500
gccccccagt aaagctgttag agttccacca ggaacagcag atcttcatcg 550

aagccaaggc ctccaaaatc ttcaactgcc ggtggagtg ggagaaggta 600

gaacggggcc gccggacctc gctttgcacc cacgaccagg ccaagatctg 650

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gttgggcctc aggcaaggag ggggtggag acgaggagat gccaagtggg 950

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gcaacaggga gggggagatt tcatcagtgt ggacagcctg tcaacttagg 1250
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aataaagctt gccccggggc a 1871

<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met Gln Leu Thr Arg Cys Cys Phe Val Phe Leu Val Gln Gly Ser
1 5 10 15

Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
20 25 30

Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
35 40 45

Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
50 55 60

Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
65 70 75

Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
80 85 90

Pro Pro Ser Ala Lys Val Lys Ile Phe Gly Trp Gly Asp Phe
95 100 105

Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
110 115 120

Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
125 130 135

His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
140 145 150

Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
155 160 165

Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu
170 175 180

Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro
185 190 195

Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp
200 205 210

Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe
215 220 225

Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr
230 235 240

Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly
245 250

<210> 93
<211> 902
<212> DNA
<213> Homo Sapien

<400> 93
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tatcatcttc ctcatcgccg gagctttctt ctgggttgtg tctctactga 150
tttcgtccct tgtttgttc atggcaagag tcattattga caacaaagat 200
ggaccaacac agaaatatct gctgatctt ggagcgtttg tctctgtcta 250
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ctgctggcct atgttctgg cttgggctt ggaatcatga gtggagtatt 400
ttcctttgtg aataccctat ctgactcctt gggccaggc acagtggca 450
ttcatggaga ttctcctcaa ttcttcctt attcagctt catgacgctg 500
gtcattatct tgctgcatgt attctgggc attgtatTTT ttgatggctg 550
tgagaagaaa aagtggggca tcctccttat cggtctcctg acccacctgc 600

tggtgtcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650
tcagcattta taatcctgggt gctcatgggc acctgggcattcttagctgc 700
gggaggcagc tgccgaagcc taaaactctg cctgctctgc caagacaaga 750
actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800
tcccaaaccg cagactacat cttagagga agcacaactg tgccttttc 850
tggaaatccc ttttctgggt ggaattgaga aagaaataaa actatgcaga 900
ta 902

<210> 94
<211> 257
<212> PRT
<213> Homo Sapien

<400> 94
Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly
1 5 10 15

Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu
20 25 30

Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr
185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly
200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr
215 220 225

Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg
245 250 255

Ser Arg

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

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gattctactg ttttgtcttc taggatcaac tcggtcatta ccacagctca 150

aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaaca 200

ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgtat 250

accattaaca cagatgctca cactggggcc agatctgcat ctgttaaatac 300

ctgctgcagg aatgacacact ggtacccaga cccacccatt gaccctggga 350

gggttgaatg tacaacagca actgcaccca catgtgttac caattttgt 400

cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450

aaatcttcac gagcctcatc atccattcct tggccccggg aggcatcctg 500

cccaccagtc aggcaaaaaa taatccagat gtccaggatg gaagccttcc 550

agcaggagga gcaggtgtaa atcctgccac ccagggaaacc ccagcaggcc 600

gcctcccaac tcccagtggc acagatgacg actttgcagt gaccacccct 650

gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatac 700

agcaaatgga attcagtaag ctgtttcaaa tttttcaac taagctgcct 750

cgaatttggt gatacatgtg aatctttatc attgattata ttatggaata 800

gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850

gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatccaa 900
cttttaaaaa caataattca atggataaat ctgtcttga aatataacat 950
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96
<211> 209
<212> PRT
<213> Homo Sapien

<400> 96
Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
1 5 10 15

Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
20 25 30

Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Ser Asn
35 40 45

Gln Val Phe Pro Ser Leu Ser Ile Pro Leu Thr Gln Met Leu
50 55 60

Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
65 70 75

Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
80 85 90

Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
95 100 105

Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
110 115 120

Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
125 130 135

Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
140 145 150

Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
155 160 165

Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
170 175 180

Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His
185 190 195

Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

200

205

<210> 97
<211> 2848
<212> DNA
<213> Homo Sapien

<400> 97
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ttgggcgtg gagggcctgt cctgaccatg gtccctgcct ggctgtggct 150
gctttgtgtc tccgtccccc aggctctccc caaggcccag cctgcagagc 200
tgtctgtgga agttccagaa aactatggtg gaaatttccc ttataacctg 250
accaagttgc cgctgccccg tgaggggct gaaggccaga tcgtgctgtc 300
aggggactca ggcaaggcaa ctgagggccc atttgctatg gatccagatt 350
ctggcttcct gctggtgacc agggccctgg accgagagga gcaggcagag 400
taccagctac aggtcaccct ggagatgcag gatggacatg tcttgtgggg 450
tccacagcct gtgcttgc acgtgaagga tgagaatgac caggtcccc 500
atttctctca agccatctac agagctcgcc tgagccgggg taccaggcct 550
ggcatcccct tcctttcct tgaggctca gaccggatg agccaggcac 600
agccaactcg gatttcgat tccacatcct gagccaggct ccagccccc 650
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agcccccaagg ggagcaccag cttgaccac gccctggaga ggacctacca 750
gctgttgta caggtcaagg acatgggtga ccaggcctca ggccaccagg 800 ..
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gagcctatcc acctggcaga gaatctaaa gtcctatacc cgcaccacat 900
ggcccaggta cactggagtg ggggtgatgt gcactatcac ctggagagcc 950
atccccccggg accctttgaa gtgaatgcag agggaaacct ctacgtgacc 1000
agagagctgg acagagaagc ccaggctgag tacctgctcc aggtgcgggc 1050
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tggtgatgga tgagaatgac aacgtgccta tctgcccctcc ccgtgacccc 1150
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<211> 807
<212> PRT
<213> Homo Sapien

<400> 98
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35 40 45
Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
50 55 60
Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
65 70 75
Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
80 85 90
Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
95 100 105
Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
110 115 120
Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
125 130 135
Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
140 145 150
Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe
155 160 165
His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe
170 175 180
Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly
185 190 195
Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu
200 205 210
Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala

	215	220	225
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230	235	240	
Leu Glu Pro Ile His Leu Ala Glu Asn Leu Lys Val Leu Tyr Pro			
245	250	255	
His His Met Ala Gln Val His Trp Ser Gly Gly Asp Val His Tyr			
260	265	270	
His Leu Glu Ser His Pro Pro Gly Pro Phe Glu Val Asn Ala Glu			
275	280	285	
Gly Asn Leu Tyr Val Thr Arg Glu Leu Asp Arg Glu Ala Gln Ala			
290	295	300	
Glu Tyr Leu Leu Gln Val Arg Ala Gln Asn Ser His Gly Glu Asp			
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Tyr Ala Ala Pro Leu Glu Leu His Val Leu Val Met Asp Glu Asn			
320	325	330	
Asp Asn Val Pro Ile Cys Pro Pro Arg Asp Pro Thr Val Ser Ile			
335	340	345	
Pro Glu Leu Ser Pro Pro Gly Thr Glu Val Thr Arg Leu Ser Ala			
350	355	360	
Glu Asp Ala Asp Ala Pro Gly Ser Pro Asn Ser His Val Val Tyr			
365	370	375	
Gln Leu Leu Ser Pro Glu Pro Glu Asp Gly Val Glu Gly Arg Ala			
380	385	390	
Phe Gln Val Asp Pro Thr Ser Gly Ser Val Thr Leu Gly Val Leu			
395	400	405	
Pro Leu Arg Ala Gly Gln Asn Ile Leu Leu Leu Val Leu Ala Met			
410	415	420	
Asp Leu Ala Gly Ala Glu Gly Phe Ser Ser Thr Cys Glu Val			
425	430	435	
Glu Val Ala Val Thr Asp Ile Asn Asp His Ala Pro Glu Phe Ile			
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Thr Ser Gln Ile Gly Pro Ile Ser Leu Pro Glu Asp Val Glu Pro			
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Gly Thr Leu Val Ala Met Leu Thr Ala Ile Asp Ala Asp Leu Glu			
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Pro Ala Phe Arg Leu Met Asp Phe Ala Ile Glu Arg Gly Asp Thr			
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Glu Gly Thr Phe Gly Leu Asp Trp Glu Pro Asp Ser Gly His Val			

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Arg Leu Arg Leu Cys Lys Asn Leu Ser Tyr Glu Ala Ala Pro Ser
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His Glu Val Val Val Val Gln Ser Val Ala Lys Leu Val Gly
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Pro Gly Pro Gly Pro Gly Ala Thr Ala Thr Val Thr Val Leu Val
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Glu Arg Val Met Pro Pro Pro Lys Leu Asp Gln Glu Ser Tyr Glu
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Ala Ser Val Pro Ile Ser Ala Pro Ala Gly Ser Phe Leu Leu Thr
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Ile Gln Pro Ser Asp Pro Ile Ser Arg Thr Leu Arg Phe Ser Leu
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Val Asn Asp Ser Glu Gly Trp Leu Cys Ile Glu Lys Phe Ser Gly
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Glu Val His Thr Ala Gln Ser Leu Gln Gly Ala Gln Pro Gly Asp
620 625 630
Thr Tyr Thr Val Leu Val Glu Ala Gln Asp Thr Ala Leu Thr Leu
635 640 645
Ala Pro Val Pro Ser Gln Tyr Leu Cys Thr Pro Arg Gln Asp His
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Gly Leu Ile Val Ser Gly Pro Ser Lys Asp Pro Asp Leu Ala Ser
665 670 675
Gly His Gly Pro Tyr Ser Phe Thr Leu Gly Pro Asn Pro Thr Val
680 685 690
Gln Arg Asp Trp Arg Leu Gln Thr Leu Asn Gly Ser His Ala Tyr ..
695 700 705
Leu Thr Leu Ala Leu His Trp Val Glu Pro Arg Glu His Ile Ile
710 715 720
Pro Val Val Val Ser His Asn Ala Gln Met Trp Gln Leu Leu Val
725 730 735
Arg Val Ile Val Cys Arg Cys Asn Val Glu Gly Gln Cys Met Arg
740 745 750
Lys Val Gly Arg Met Lys Gly Met Pro Thr Lys Leu Ser Ala Val
755 760 765
Gly Ile Leu Val Gly Thr Leu Val Ala Ile Gly Ile Phe Leu Ile
770 775 780
Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp

785

790

795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val
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<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

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<211> 596
<212> PRT
<213> Homo Sapien

<400> 100

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Ala	Asn	Thr	Gly	Ser	Ser	Val	Ile	Ser	Ser	Gly	Ala	Ser	Thr	Ala
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Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala
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Thr	Ile	Ser	Gly	Ser	Ser	Val	Thr	Ser	Asn	Gly	Val	Ser	Ile	Val
		65						70					75	
Thr	Asn	Ser	Glu	Phe	His	Thr	Thr	Ser	Ser	Gly	Ile	Ser	Thr	Ala
		80						85					90	
Thr	Asn	Ser	Glu	Phe	Ser	Thr	Ala	Ser	Ser	Gly	Ile	Ser	Ile	Ala
		95						100					105	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
		110						115					120	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Ser	Thr	Val
		125						130					135	
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		140						145					150	
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		155						160					165	
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		170						175					180	
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
		185						190					195	
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		200						205					210	
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		215						220					225	
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		230						235					240	
Thr	Asn	Ser	Glu	Ser	Arg	Thr	Thr	Ser	Asn	Gly	Ala	Gly	Thr	Ala
		245						250					255	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
		260						265					270	
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala
		275						280					285	

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290 295 300

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
305 310 315

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala
320 325 330

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
335 340 345

Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala
350 355 360

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
365 370 375

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala
380 385 390

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Val Ser Thr Ala
395 400 405

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
410 415 420

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Glu Ala Ser Thr Ala
425 430 435

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
440 445 450

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
455 460 465

Thr Asn Ser Gly Ser Ser Val Thr Ser Ala Gly Ser Gly Thr Ala
470 475 480

Ala Leu Thr Gly Met His Thr Thr Ser His Ser Ala Ser Thr Ala
485 490 495

Val Ser Glu Ala Lys Pro Gly Gly Ser Leu Val Pro Trp Glu Ile
500 505 510

Phe Leu Ile Thr Leu Val Ser Val Val Ala Ala Val Gly Leu Phe
515 520 525

Ala Gly Leu Phe Phe Cys Val Arg Asn Ser Leu Ser Leu Arg Asn
530 535 540

Thr Phe Asn Thr Ala Val Tyr His Pro His Gly Leu Asn His Gly
545 550 555

Leu Gly Pro Gly Pro Gly Gly Asn His Gly Ala Pro His Arg Pro
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Arg Trp Ser Pro Asn Trp Phe Trp Arg Arg Pro Val Ser Ser Ile
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Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro
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<210> 101
<211> 1728
<212> DNA
<213> Homo Sapien

<400> 101
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<210> 102
<211> 414
<212> PRT
<213> Homo Sapien

<400> 102
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Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile
35 40 45
Tyr Phe Ile Leu Thr Leu Phe Trp Gly Ser Phe Phe Gly Ser Ile
50 55 60
Phe Met Leu Ser Pro Phe Leu Pro Leu Met Phe Val Asn Pro Ser
65 70 75
Trp Tyr Arg Trp Ile Asn Asn Arg Leu Val Ala Thr Trp Leu Thr
80 85 90
Leu Pro Val Ala Leu Leu Glu Thr Met Phe Gly Val Lys Val Ile
95 100 105
Ile Thr Gly Asp Ala Phe Val Pro Gly Glu Arg Ser Val Ile Ile
110 115 120
Met Asn His Arg Thr Arg Met Asp Trp Met Phe Leu Trp Asn Cys
125 130 135

Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys
140 145 150

Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala
155 160 165

Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser
170 175 180

His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro
185 190 195

Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn
200 205 210

Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln
215 220 225

Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe
230 235 240

Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His
245 250 255

Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys
260 265 270

His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val
275 280 285

His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu
290 295 300

Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu
305 310 315

Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln
320 325 330

Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val
335 340 345

Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met
350 355 360

Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile
365 370 375

Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly
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Leu Glu Ile Ile Glu Leu Ala Cys Tyr Arg Leu Leu His Lys Gln
395 400 405

Pro His Leu Asn Ser Lys Lys Asn Glu
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<210> 103
<211> 2403
<212> DNA
<213> Homo Sapien

<400> 103
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ttgttgagac CCTATATCCA gcatGCGATg tatgacGAGG AAAAGGGGAC 1500
tcccataTTc atatgtCCAG tgtCCTGGGG atgAGACAGA gaAGACCTG 1550
cttaaAGGGC CCCACACCAC agACCCAGAC acAGCCAAgg gagAGTGCTC 1600
ccgacAGGTG gCCCCAGCTT CCTCTCCGGA gcCTGCGCAC AGAGAGTCAC 1650
gCCCCCCCAct CTCCCTTAgg gagCTGAGGT TCTTCTGCC TGAGCCCTGC 1700
agcAGCGGCa gTCACAGCTT ccAGATGAGG gGGGATTGGC CTGACCCtGT 1750
gggAGTCAGA AGCCATGGCT GCCCTGAAGT gGGGACGGAA tagACTCACA 1800
ttAGGTTAG tttGTGAAAAA CTCCATCCAG CTAAGCGATC TTGAACAAGT 1850
cacaACCTCC caggCTCCTC atttGCTAGT cacGGACAGT gattCCTGCC 1900
tcACAGGTGA agATTAAGA gacaACGAAT gtGAATCATG CTTGCAAGTT 1950
tgAGGGCACA gtGTTGCTA atGATGTGTT tttatTTTACatTTTCCC 2000
accataAAact CTGTTGCTT ATTCCACATT aATTtACTTT TCTCTATAcc 2050
aaATCACCcA tgGAATAGTT ATTGAACACC TGCTTGTGA ggCTCAAAGA 2100
ataAAAGAGGA ggtAGGATTt tTCACTGATT CTATAAGCCC AGCATTACCT 2150
gataccAAA CCAGGCAAAG AAAACAGAAg aAGAGGAAGG AAAACTACAG 2200
gtccatATCC CTCATTAACA cAGACACAAA aATTCTAAAT AAAATTtAA 2250
caaATTAAC taaACAATAT atttAAAGAT gATATATAAC tactCAGTGT 2300
ggtttgtccc acaaATGcAG agttGGTTA atatttAAAT atcaACCAGT 2350
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aaa 2403

<210> 104
<211> 466
<212> PRT
<213> Homo Sapien

<400> 104
Met Ala Phe Val Leu Ile Leu Val Leu Ser Phe Tyr Glu Leu Val
1 5 10 15

Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala

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Leu Val Gly Glu Asp Ala Val Phe Ser Cys Ser Leu Phe Pro Glu			
35	40	45	
Thr Ser Ala Glu Ala Met Glu Val Arg Phe Phe Arg Asn Gln Phe			
50	55	60	
His Ala Val Val His Leu Tyr Arg Asp Gly Glu Asp Trp Glu Ser			
65	70	75	
Lys Gln Met Pro Gln Tyr Arg Gly Arg Thr Glu Phe Val Lys Asp			
80	85	90	
Ser Ile Ala Gly Gly Arg Val Ser Leu Arg Leu Lys Asn Ile Thr			
95	100	105	
Pro Ser Asp Ile Gly Leu Tyr Gly Cys Trp Phe Ser Ser Gln Ile			
110	115	120	
Tyr Asp Glu Glu Ala Thr Trp Glu Leu Arg Val Ala Ala Leu Gly			
125	130	135	
Ser Leu Pro Leu Ile Ser Ile Val Gly Tyr Val Asp Gly Gly Ile			
140	145	150	
Gln Leu Leu Cys Leu Ser Ser Gly Trp Phe Pro Gln Pro Thr Ala			
155	160	165	
Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Ser Asp Ser Arg			
170	175	180	
Ala Asn Ala Asp Gly Tyr Ser Leu Tyr Asp Val Glu Ile Ser Ile			
185	190	195	
Ile Val Gln Glu Asn Ala Gly Ser Ile Leu Cys Ser Ile His Leu			
200	205	210	
Ala Glu Gln Ser His Glu Val Glu Ser Lys Val Leu Ile Gly Glu			
215	220	225	
Thr Phe Phe Gln Pro Ser Pro Trp Arg Leu Ala Ser Ile Leu Leu			
230	235	240	
Gly Leu Leu Cys Gly Ala Leu Cys Gly Val Val Met Gly Met Ile			
245	250	255	
Ile Val Phe Phe Lys Ser Lys Gly Lys Ile Gln Ala Glu Leu Asp			
260	265	270	
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys			
275	280	285	
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys			
290	295	300	
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro			

305	310	315
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val		
320	325	330
Val Ala Ser Gln Gly Phe Gln Ala Gly Arg His Tyr Trp Glu Val		
335	340	345
Asp Val Gly Gln Asn Val Gly Trp Tyr Val Gly Val Cys Arg Asp		
350	355	360
Asp Val Asp Arg Gly Lys Asn Asn Val Thr Leu Ser Pro Asn Asn		
365	370	375
Gly Tyr Trp Val Leu Arg Leu Thr Thr Glu His Leu Tyr Phe Thr		
380	385	390
Phe Asn Pro His Phe Ile Ser Leu Pro Pro Ser Thr Pro Pro Thr		
395	400	405
Arg Val Gly Val Phe Leu Asp Tyr Glu Gly Gly Thr Ile Ser Phe		
410	415	420
Phe Asn Thr Asn Asp Gln Ser Leu Ile Tyr Thr Leu Leu Thr Cys		
425	430	435
Gln Phe Glu Gly Leu Leu Arg Pro Tyr Ile Gln His Ala Met Tyr		
440	445	450
Asp Glu Glu Lys Gly Thr Pro Ile Phe Ile Cys Pro Val Ser Trp		
455	460	465

Gly

<210> 105
<211> 2103
<212> DNA
<213> Homo Sapien

<400> 105
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gtcatcttca tatccctgat tgtcctggca gtgtgcattg gactcactgt 150
tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
tgtcatttac aactgacaaa ctatatgctg agttggcag agaggcttct 250
aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
attttataaa tctccattaa gggagaatt tgtcaagtct caggttatca 350
agttcagtca acagaagcat ggagtgtgg ctcatatgct gttgatttgt 400
agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450

tgtttacat gaaaagctgc aagatgctgt aggacccct aaagtagatc 500
ctcaactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
ctaaaccatt gctgcggAAC acgaagaagt aaaactctag gtcagagtct 600
caggatcgTT ggtggacAG aagtagaAGA gggtGAATGG ccctggcagg 650
ctagcctgca gtggatggg agtcatcgct gtggagcaac cttAattaat 700
gccacatggc ttgtgagtgc tgctcactgt tttacaACat ataagaACCC 750
tgccagatgg actgcttcct ttggagtaac aataAAACCT tcgAAAatga 800
aacggggTct ccggagaATA attgtccatg AAAAATACAA acACCCatCA 850
catgactatg atatttctct tgcagagCT tctAGCCtG ttccctACAC 900
aaatgcAGTA catAGAGTTT gtctccCTGA tgcATCCTAT gagTTCAAC 950
caggTgatgt gatTTTGT acaggATTG gagCactgAA aaATgatggt 1000
tacagtcaaa atcatcttcg acaAGCACAG gtgactctca tagacgctac 1050
aacttgcaat gaACCTCAAG ctTACAATGA CGCCATAACT CCTAGAAATGT 1100
tatgtgctgg ctccTTAGAA ggAAAAACAG atgcatGCCA gggtgactct 1150
ggaggaccac tggTTAGTTC agatgCTAGA gatATCTGGT accttgctgg 1200
aatagtgagc tggggAGATG aatgtgcGAA ACCCAACAAg CCTGGTGTtT 1250
ataCTAGAGT tacggcTTG cgggactgGA ttacttcaAA aactggTATC 1300
taaGAGACAA aAGCCTCATG gaACAGATAA cATTttttt tgTTTTTGG 1350
gtgtggaggc cATTtttAGA gatacAGAA tggAGAAAGC ttgcaAAACa 1400
gctagatttG actgatctca atAAactgtt tgcttgatgc atgtatTTc 1450
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tcccctacat ttTATTGGCA cAGAAAAGTA ttaggtgtt ttcttagtgg 1800
aatattAGAA atgatcatAT tcattatGAA aggtcaAGCA aAGACAGCAG 1850
aataccaATC acttcatcat ttagGAAGTA tggAAactAA gttaAGGAAG 1900

tccagaaaaga agccaagata tatccttatt ttcatttcca aacaactact 1950
atgataaaatg tgaagaagat tctgttttt tgtgacctat aataattata 2000
caaacttcat gcaatgtact tggtaaaggc aaattnaaggc aaatatttat 2050
ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
cca 2103

<210> 106
<211> 423
<212> PRT
<213> Homo Sapien

<400> 106
Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys
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Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
35 40 45
Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
50 55 60
Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
65 70 75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
80 85 90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
95 100 105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
110 115 120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
125 130 135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val
140 145 150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile
155 160 165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr
170 175 180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly
185 190 195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln

200	205	210
Trp Asp Gly Ser His Arg Cys Gly Ala Thr Leu Ile Asn Ala Thr		
215	220	225
Trp Leu Val Ser Ala Ala His Cys Phe Thr Thr Tyr Lys Asn Pro		
230	235	240
Ala Arg Trp Thr Ala Ser Phe Gly Val Thr Ile Lys Pro Ser Lys		
245	250	255
Met Lys Arg Gly Leu Arg Arg Ile Ile Val His Glu Lys Tyr Lys		
260	265	270
His Pro Ser His Asp Tyr Asp Ile Ser Leu Ala Glu Leu Ser Ser		
275	280	285
Pro Val Pro Tyr Thr Asn Ala Val His Arg Val Cys Leu Pro Asp		
290	295	300
Ala Ser Tyr Glu Phe Gln Pro Gly Asp Val Met Phe Val Thr Gly		
305	310	315
Phe Gly Ala Leu Lys Asn Asp Gly Tyr Ser Gln Asn His Leu Arg		
320	325	330
Gln Ala Gln Val Thr Leu Ile Asp Ala Thr Thr Cys Asn Glu Pro		
335	340	345
Gln Ala Tyr Asn Asp Ala Ile Thr Pro Arg Met Leu Cys Ala Gly		
350	355	360
Ser Leu Glu Gly Lys Thr Asp Ala Cys Gln Gly Asp Ser Gly Gly		
365	370	375
Pro Leu Val Ser Ser Asp Ala Arg Asp Ile Trp Tyr Leu Ala Gly		
380	385	390
Ile Val Ser Trp Gly Asp Glu .Cys Ala Lys Pro Asn Lys Pro Gly		
395	400	405
Val Tyr Thr Arg Val Thr Ala Leu Arg Asp Trp Ile Thr Ser Lys		
410	415	420
Thr Gly Ile		

<210> 107
<211> 2397
<212> DNA
<213> Homo Sapien

<400> 107
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cccaaggcggg cgtggggcac cgggcccagc gccacgcata gctgccgtt 150
tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
gctcacaatg gccagagaag attccgtaa gtgtctgcgc tgcctgtct 250
acgcccctcaa tctgctctt tggtaatgt ccatcagtgt gttggcagtt 300
tctgcttggta tgaggacta cctaaataat gttctcaatt taactgcaga 350
aacgagggtt gaggaagcag tcattttgac ttacttcct gtggttcatc 400
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aagttgcatt gtcattttct gtgtagaact ggcttgcgc gttggacat 550
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tcactgactg gttggaaatg acagagatgg actggcccc agattcctgc 750
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cagtgacctt tatcaagagg gttgtggaa gaaaatgtat tccttttga 850
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cagaaaactt tcaatattgg tgactaccta aatgtgattt ttgctggta 1650
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atggaaagaa aattaaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 108
<211> 305
<212> PRT
<213> Homo Sapien

<400> 108
Met Ala Arg Glu Asp Ser Val Lys Cys Leu Arg Cys Leu Leu Tyr
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Ala Leu Asn Leu Leu Phe Trp Leu Met Ser Ile Ser Val Leu Ala
20 25 30

Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
35 40 45
Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
50 55 60

Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
65 70 75

Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
80 85 90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys
				95					100				105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met
	110					115				115			120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met
			125				125		130				135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp
			140				140		145				150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe
			155				155		160				165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser
			170				170		175				180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln
			185				185		190				195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met
			200				200		205				210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe
			215				215		220				225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu
			230				230		235				240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro
			245				245		250				255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His
			260				260		265				270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg
			275				275		280				285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe
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Glu	Met	Glu	Glu	Leu										
			305											

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

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gaggccttaa aaaaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

agtattaaga ggattttcca gtgttctgg cagttggtcc agaaggatgc 200
ctccattcct gcttctcacc tgcctcttca tcacaggcac ctccgtgtca 250
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ggaatttgga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr
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Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser
									25					30

Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser
									35					45

Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr
									50					60

His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile
									65					75

Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly
									80					90

Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys
									95					105

Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val Glu
110 115 120

Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys
125 130 135

Pro Ser Val Cys Phe His Val Tyr Cys Gly His Phe Tyr Asp Ile
140 145 150

Cys Asp Glu Asp Cys His Gly Ser Cys Ser Asp Thr Ser Glu Cys
155 160 165

Thr Cys Ala Pro Gly Thr Val Leu Gly Pro Asp Arg Gln Thr Cys
170 175 180

Phe Asp Glu Asn Glu Cys Glu Gln Asn Asn Gly Gly Cys Ser Glu
185 190 195

Ile Cys Val Asn Leu Lys Asn Ser Tyr Arg Cys Glu Cys Gly Val
200 205 210

Gly Arg Val Leu Arg Ser Asp Gly Lys Thr Cys Glu Asp Val Glu
215 220 225

Gly Cys His Asn Asn Gly Gly Cys Ser His Ser Cys Leu Gly
230 235 240

Ser Glu Lys Gly Tyr Gln Cys Glu Cys Pro Arg Gly Leu Val Leu
245 250 255

Ser Glu Asp Asn His Thr Cys Gln Val Pro Val Leu Cys Lys Ser
260 265 270

Asn Ala Ile Glu Val Asn Ile Pro Arg Glu Leu Val Gly Gly Leu
275 280 285

Glu Leu Phe Leu Thr Asn Thr Ser Cys Arg Gly Val Ser Asn Gly
290 295 300

Thr His Val Asn Ile Leu Phe Ser Leu Lys Thr Cys Gly Thr Val
305 310 315

Val Asp Val Val Asn Asp Lys Ile Val Ala Ser Asn Leu Val Thr
320 325 330

Gly Leu Pro Lys Gln Thr Pro Gly Ser Ser Gly Asp Phe Ile Ile
335 340 345

Arg Thr Ser Lys Leu Leu Ile Pro Val Thr Cys Glu Phe Pro Arg
350 355 360

Leu Tyr Thr Ile Ser Glu Gly Tyr Val Pro Asn Leu Arg Asn Ser
365 370 375

Pro Leu Glu Ile Met Ser Arg Asn His Gly Ile Phe Pro Phe Thr
380 385 390

Leu Glu Ile Phe Lys Asp Asn Glu Phe Glu Glu Pro Tyr Arg Glu
395 400 405

Ala Leu Pro Thr Leu Lys Leu Arg Asp Ser Leu Tyr Phe Gly Ile
410 415 420

Glu Pro Val Val His Val Ser Gly Leu Glu Ser Leu Val Glu Ser
425 430 435

Cys Phe Ala Thr Pro Thr Ser Lys Ile Asp Glu Val Leu Lys Tyr
440 445 450

Tyr Leu Ile Arg Asp Gly Cys Val Ser Asp Asp Ser Val Lys Gln
455 460 465

Tyr Thr Ser Arg Asp His Leu Ala Lys His Phe Gln Val Pro Val
470 475 480

Phe Lys Phe Val Gly Lys Asp His Lys Glu Val Phe Leu His Cys
485 490 495

Arg Val Leu Val Cys Gly Val Leu Asp Glu Arg Ser Arg Cys Ala
500 505 510

Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp
515 520 525

Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg
530 535 540

Ile Asp Trp Glu Asp
545

<210> 111
<211> 2063
<212> DNA
<213> Homo Sapien

<400> 111
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cttgggggtga caatctcagc tccaggctac agggagaccc ggaggatcac 200
agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
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aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
attgtgggtg tcctcatcaa ggtgattctg gataaatact acttcctctg 400
cgggcagcct ctccacttca tcccgaggaa gcagctgtgt gacggagagc 450

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gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccacactgca 550
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tcacagaagc tctcgctgag acagcctgta ggcagatggg ctacagcaga 650
gctgtggaga ttggcccaga ccaggatctg gatgttggaaatcacaga 700
aacacagccag gagcttcgca tgcgaaactc aagtggccc tgtctctcag 750
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ccccgtgtgg tgggtggga ggaggcctct gtggattctt ggccttggca 850
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gtgttcaact ggaaggtgcg ggcaggctca gacaaactgg gcagttcccc 1000
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tcagggcacag tcagggccat ctgtctgccc ttcttgatg aggagctcac 1150
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aactttccca cactactgaa tggaagcagg ctgtcttgta aaagcccaga 1850
tcactgtggg ctggagagga gaaggaaagg gtctgcgcca gccctgtccg 1900

tcttcaccca tcccccaagcc tactagagca agaaaccagt tgtaatataa 1950
aatgcactgc cctactgttgc gtatgactac cgttacctac tgttgtcatt 2000
gttattacag ctatggccac tattattaaa gagctgtgta acatctctgg 2050
caaaaaaaaaaaa aaa 2063

<210> 112
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112
Met Leu Gln Asp Pro Asp Ser Asp Gln Pro Leu Asn Ser Leu Asp
1 5 10 15
Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg.
20 25 30
Lys Val Gly Ile Pro Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45
Ile Ile Ile Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr
50 55 60
Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln
65 70 75
Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu
80 85 90
His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg
95 100 105
Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr
110 115 120
Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu
125 130 135
Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu
140 145 150
Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn
155 160 165
Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser
170 175 180
Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu
185 190 195
Lys Thr Pro Arg Val Val Gly Glu Glu Ala Ser Val Asp Ser
200 205 210

Trp Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys
215 220 225

Gly Gly Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His
230 235 240

Cys Phe Arg Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala
245 250 255

Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys
260 265 270

Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp
275 280 285

Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe Ser Gly Thr
290 295 300

Val Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu Thr Pro
305 310 315

Ala Thr Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln Asn
320 325 330

Gly Gly Lys Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val
335 340 345

Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu
350 355 360

Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro Glu Gly Gly Val
365 370 375

Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Tyr Gln Ser
380 385 390

Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr Gly Cys
395 400 405

Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala Tyr
410 415 420

Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu
425 430

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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aaggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100

ttttcagca actaaaaaaag ccacaggagt tgaactgcta ggattctgac 150

tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200
tttgttctct tgtaacttagc ctttacccct ctaacacaga ggatctgtca 250
ctgtggctct ggcggaaacc tgaccccac tctggAACGA gaacagaggt 300
ttctacccac accgtcccct cgaAGCCGGG gacagcctca ccttgctggc 350
ctctcgctgg agcagtgcgg tcaccaactg tctcacgtct ggaggcactg 400
actcgggcag tgcaggttagc tgagcctctt ggtagctgcg gctttcaagg 450
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taagaatcag ttattgccgg gtgtgggtggc ctgtaatgcc aacattttgg 1500
gaggccgagg cgggttagatc acctgaggc aggagttcaa gaccagcctg 1550
gccaacatgg taaaacccct gtctctacta aaaataaaaaaaa aaaaacttagcc 1600

aggcatggtg gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650
gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
ttcagcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750
aattatggtt atttgtaa 1768

<210> 114
<211> 109
<212> PRT
<213> Homo Sapien

<400> 114
Met Leu Trp Trp Leu Val Leu Leu Leu Pro Thr Leu Lys Ser
1 5 10 15
Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
20 . 25 30
Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
35 40 45
Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
50 55 60
Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
65 70 75
Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
80 85 90
Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
95 100 105
Arg Arg Arg Asp

<210> 115
<211> 1197
<212> DNA
<213> Homo Sapien

<400> 115
cagcagtgg ctctcagtcc tctcaaagca agggaaagagt actgtgtgct 50
gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
ttgtggactg gtgtttggta tcctggccct aactctaatt gtcctgtttt 200
gggggagcaa gcacttctgg ccggaggtag ccaaaaaagc ctatgacatg 250
gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
tgatcctgtg accagaactg aaatattcag aagcgaaat ggcactgatg 350

aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400
gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
ctttcttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
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gaccatgtat tggatcaatc ccactcta atcagttct gagttacaag 650
actttgagga ggagggagaa gatcttcaact ttccgtccaa cgaaaaaaaa 700
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atactgaaaa tggaatagaa tttgatccca tgctggatga gagaggttat 850
tgttgatatt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
acctttacta ggctactacc catatccata ctgctaccaa ggaggacgag 950
tcatctgtcg tgtcatcatg cttgttaact ggtgggtggc ccgcattgtg 1000
gggagggtct aataggaggt ttgagctaa atgcttaaac tgctggcaac 1050
atataataaa tgcatgctat tcaatgaatt tctgcctatg aggcattctgg 1100
ccccctggtag ccagctctcc agaattactt gtaggttaatt cctctttca 1150
tgttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaaaa 1197

<210> 116
<211> 317
<212> PRT
<213> Homo Sapien

<400> 116
Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
1 5 10 15

Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
20 25 30

Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
35 40 45

Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys
50 55 60

Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys
65 70 75

Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe

80	85	90
Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe		
95	100	105
Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys		
110	115	120
Phe Ile Lys Thr Gln Ile Lys Val Ile Pro Glu Phe Ser Glu Pro		
125	130	135
Glu Glu Glu Ile Asp Glu Asn Glu Glu Ile Thr Thr Thr Phe Phe		
140	145	150
Glu Gln Ser Val Ile Trp Val Pro Ala Glu Lys Pro Ile Glu Asn		
155	160	165
Arg Asp Phe Leu Lys Asn Ser Lys Ile Leu Glu Ile Cys Asp Asn		
170	175	.. 180
Val Thr Met Tyr Trp Ile Asn Pro Thr Leu Ile Ser Val Ser Glu		
185	190	195
Leu Gln Asp Phe Glu Glu Glu Gly Glu Asp Leu His Phe Pro Ala		
200	205	210
Asn Glu Lys Lys Gly Ile Glu Gln Asn Glu Gln Trp Val Val Pro		
215	220	225
Gln Val Lys Val Glu Lys Thr Arg His Ala Arg Gln Ala Ser Glu		
230	235	240
Glu Glu Leu Pro Ile Asn Asp Tyr Thr Glu Asn Gly Ile Glu Phe		
245	250	255
Asp Pro Met Leu Asp Glu Arg Gly Tyr Cys Cys Ile Tyr Cys Arg		
260	265	270
Arg Gly Asn Arg Tyr Cys Arg Arg Val Cys Glu Pro Leu Leu Gly		
275	280	285
Tyr Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys		
290	295	300
Arg Val Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly		
305	310	315
Arg Val		

<210> 117
<211> 2121
<212> DNA
<213> Homo Sapien

<400> 117
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ggcagcttct cgcaggcggc agggcggcg gccaggatca tgtccaccac 100
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gcatcgccgc caccggatg gacatgtgga gcacccagga cctgtacgac 200
aaccgggtca cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt 250
gaggcagagt tcaggcttca ccgaatgcag gccctatttc accatcctgg 300
gacttccagc catgctgcag gcagtgcag ccctgtatgtat cgtaggcac 350
gtcctgggtg ccattggcct cctggtatcc atcttgccc tgaaatgcat 400
ccgcattggc agcatggagg actctgccaa agccaacatg acactgaccc 450
ccgggatcat gttcattgtc tcaggtctt gtgcaattgc tggagtgtct 500
gtgttgcca acatgctggt gactaacttc tggatgtcca cagctaacat 550
gtacaccggc atgggtggga tgggcagac tggtcagacc aggtacacat 600
ttggtgccgc tctttcgtg ggctgggtcg ctggaggcct cacactaatt 650
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aagaagatac acgtggagg tgcccgaca gaggacgagg tacaatctta 850
tccttccaag cacgactatg tgtaatgctc taagacctct cagcacggc 900
ggaagaaact cccggagagc tcacccaaaa aacaaggaga tcccatctag 950
atttcttctt gctttgact cacagctgga agtttagaaaa gcctcgattt 1000
catcttggaa gaggccaaat ggtcttagcc tcagtcgtc tctctaaata 1050
ttccaccata aaacagctga gttatttatg aatttagaggc tatagctcac 1100
attttcaatc ctctatttct ttttttaaat ataactttct actctgtatga 1150
gagaatgtgg tttaatctc tctctcacat tttgtatgatt tagacagact 1200
ccccctcttc ctcctagtca ataaacccat tgatgtcta tttcccagct 1250
tatccccaaag aaaacttttg aaagggaaaga gtagacccaa agatgttatt 1300
ttctgctgtt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350
cacttactga agaagaagca ataagagaaa gatattgtatctctccag 1400
cccatgatct cggtttctt acactgtgat cttaaaagtt accaaaccaa 1450

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tcctctttct gtcgcgggtc agaaattgtc cctagatgaa tgagaaaaatt 1600
atttttttta atttaagtcc taaaatatagt taaaataaat aatgttttag 1650
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gactagcctg ggcaacatgg agaagccctg tctctacaaa atacagagag 1900
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gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
gtctaaaaaaaaataatggaa cacagcaagt cctaggaagt 2100
aggttaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met	Ser	Thr	Thr	Cys	Gln	Val	Val	Ala	Phe	Leu	Leu	Ser	Ile
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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
						20			25			30		

Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40			45		

Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50				55			60			

Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65				70			75			

Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80				85			90			

Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
					95			100			105			

Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110				115			120			

Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly
125 130 135

Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser
140 145 150

Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val
155 160 165

Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val
170 175 180

Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala
185 190 195

Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser
200 205 210

Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe
215 220 225

Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
230 235 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro
245 250 255

Ser Lys His Asp Tyr Val
260

<210> 119
<211> 2010
<212> DNA
<213> Homo Sapien

<400> 119
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caacccatgc cttagaaatc gctgggctgt ttcttggtgg tgttggaatg 150
gtgggcacag tggctgtcac tgtcatgcct cagtgagag tgtcggcctt 200
cattgaaaac aacatcgtagg tttttgaaaa cttctggaa ggactgtgga 250
tgaattgcgt gaggcaggct aacatcgtagg tgcagtgcac aatctatgtat 300
tccctgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
tgctgcttcc gtgatgtcct tcttggcttt catgatggcc atccttggca 400
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ctgctgacgg ctggaatcat cttcatcatc acgggcatgg tggtgctcat 500

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tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
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atcgacacaac ccaaaaaagt tatcacaccc gaaagaagtc accgagcgtc 750
tactccagaa gtcagtatgt gtagttgtgt atgtttttt aactttacta 800
taaagccatg caaatgacaa aaatctatat tactttctca aatggaccc 850
caaagaaaact ttgatttact gttcttaact gcctaattttt aattacagga 900
actgtgcac aacttattt gattctataa gctatttcag cagaatgaga 950
tattaaaccc aatgcttga ttgttctaga aagtatagta atttgttttc 1000
taagggtt caagcatcta ctcttttat cattacttc aaaatgacat 1050
tgctaaagac tgcattattt tactactgta atttctccac gacatagcat 1100
tatgtacata gatgagtgta acatttat ctcacataga gacatgctta 1150
tatggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200
actcaactat tgcttttcag ggaaatcatg gatagggtt aagaaggta 1250
ctattaattt tttaaaaaca gcttagggat taatgtcctc cattataat 1300
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gcattttgac aagaaatcat atatgtatgg atatatttttta ataagtattt 1650
gagtcagac tttgagggtt catcaatata aataaaagag cagaaaaata 1700
tgtcttggtt ttcatttgct taccaaaaaa acaacaacaa aaaaagggtt 1750
cctttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800
atttttgttc tgtggaaat aaatttcctt cttgtaccat ttctgttttag 1850
ttttactaaa atctgtaaat actgtatttt tctgtttattt ccaaatttga 1900
tggaaactgac aatccaattt gaaagttgtt gtcgacgtct gtctagctta 1950

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<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

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20 25 30

Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn
. 35 .. 40 45.

Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala Asn Ile
50 55 60

Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser Pro
65 70 75

Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
80 85 90

Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr
95 100 105

Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu
110 115 120

Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile
125 130 135

Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn
140 145 150

Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu
155 160 165

Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly Gly Ala
170 175 180

Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser Tyr
185 190 195

Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His
200 205 210

Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val
215 220 225

<210> 121

<211> 1257
<212> DNA
<213> Homo Sapien

<400> 121
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ccgcctccag ctccgcgtg cccggcagcc gggagccatg cgaccccagg 150
gccccgcccgc ctcccccgcag cggctccgcg gcctcctgct gtcctgctg 200
ctgcagctgc ccgcgccgtc gagcgccctct gagatccccca agggaaagca 250
aaaggcgcaag ctccggcaga gggaggttgtt ggacctgttat aatggaatgt 300
gcttacaagg gccagcagga gtgcctggc gagacgggag ccctggggcc 350
aatgttattc cgggtacacc tggatccca ggtcgggatg gattcaaagg 400
agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacccca 450
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aaaattgcgg agtgtacatt tacaaagatg cgttcaaata gtgctctaag 550
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attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700
aattaatatt catcgactt cttctgtgga aggactttgt gaaggaattt 750
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tgaagaacta caaaaataaa tgcttaatt ttcatttgct acctctttt 900
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gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaaatgt 1000
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aagtggtttc aatatttttt ttagttgggtt agaatacttt cttcatagtc 1100
acattctctc aacctataat ttgaaatatt gttgtggct tttgttttt 1150
ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200
aatttgtaaa tgttaagaat ttttttata tctgttaat aaaaattatt 1250
tccaaca 1257

<210> 122

<211> 243
<212> PRT
<213> Homo Sapien

<400> 122

Met	Arg	Pro	Gln	Gly	Pro	Ala	Ala	Ser	Pro	Gln	Arg	Leu	Arg	Gly
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Leu	Gln	Leu	Pro	Ala	Pro	Ser	Ser	Ala						
							20		25			30		
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg
				35				40				45		
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala
				50					55			60		
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro
				65				70			75			
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys
				80				85			90			
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn
				95				100				105		
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu
				110				115				120		
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser
				125				130			135			
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg
				140				145			150			
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu
				155				160			165			
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln
				170				175			180			
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser
				185				190			195			
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp
				200				205			210			
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp
				215				220			225			
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu
				230				235			240			
Leu	Pro	Lys												

<210> 123

<211> 2379
<212> DNA
<213> Homo Sapien

<400> 123
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atacagatgt ggcagctca gtagccccaa attgcctgga agaatacatc 150
atgttttcg ataagaagaa attgttagat ccagttttt ttttaaccgc 200
cccctccccca ccccccaaaa aaactgtaaa gatgaaaaaa cgtaatatcc 250
atgaagatcc tattacctag gaagatttg atgtttgct gcgaatgcgg 300
tgttgggatt tatttgttct tggagtgttc tgctggctg gcaaagaata 350
atgttccaaa atcggccat ctcccaaggg gtccaatttt tcttcctggg 400
tgtcagcgag ccctgactca ctacagtgc gctgacaggg gctgtcatgc 450
aactggcccc taagccaaag caaaagacct aaggacgacc tttgaacaat 500
acaaaggatg ggttcaatg taatttagct actgagcgg a tcagctgttag 550
cactggttat agccccact gtcttactga caatgcttc ttctgccaa 600
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atctcagaaa ttacaggaga taccctcaag tatactgtct ggttgcttag 700
gtttgtccct tcgctataac agccttcaaa aacttaagta taatcaattt 750
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caatattgac gaaaatgctt ttaatggaa acgcagactc aaagagctga 850
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gtgacaaatt tacgaaactt ggatctgtcc tataatcagc tgcattctct 950
gggatctgaa cagttcggg gcttgcggaa gctgctgagt ttacatttac 1000
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gaatgtctt gctggcatga tcagactcaa agaacttcac ctggagcaca 1150
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cagaacctt acttgcagtg gaataaaatc agtgcatacg gacagaccat 1250
gtcctggacc tggagctcct tacaaaggct tgatttatca ggcaatgaga 1300
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cgcctcaacc tggattccaa caagctcaca tttattggtc aagagatttt 1400
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aatgcagcag aaatatttgc tcccttgtaa actggctgaa aagttttaaa 1500
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gattataaac ccaccaacac ggagaccagc gagatgctgc tgaatggac 2000
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ttgaactctg gtgactatca agggAACGCG atgccccccc tcccttccc 2150
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tcataatact ggtcatttc ctctcataca taatcaaccc attgaaattt 2250
aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
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aaaacttctt tcataaggtaa aaaaaaaaaa 2379

<210> 124
<211> 513
<212> PRT
<213> Homo Sapien

<400> 124
Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala
1 5 10 15
Leu Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala
20 25 30

Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val
35 40 45

Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser
50 55 60

Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys
65 70 75

Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu
80 85 90

Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe
95 100 105

Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg
110 115 120

Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu
125 130 135

Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser
140 145 150

Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg
155 160 165

Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys
170 175 180

Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser
185 190 195

Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu
200 205 210

His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu Phe
215 220 225

Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys
230 235 240

Ile Ser Val Ile Gly Gln Thr Met Ser Trp Thr Trp Ser Ser Leu
245 250 255

Gln Arg Leu Asp Leu Ser Gly Asn Glu Ile Glu Ala Phe Ser Gly
260 265 270

Pro Ser Val Phe Gln Cys Val Pro Asn Leu Gln Arg Leu Asn Leu
275 280 285

Asp Ser Asn Lys Leu Thr Phe Ile Gly Gln Glu Ile Leu Asp Ser
290 295 300

Trp Ile Ser Leu Asn Asp Ile Ser Leu Ala Gly Asn Ile Trp Glu
305 310 315

Cys Ser Arg Asn Ile Cys Ser Leu Val Asn Trp Leu Lys Ser Phe
320 325 330

Lys Gly Leu Arg Glu Asn Thr Ile Ile Cys Ala Ser Pro Lys Glu
335 340 345

Leu Gln Gly Val Asn Val Ile Asp Ala Val Lys Asn Tyr Ser Ile
350 355 360

Cys Gly Lys Ser Thr Thr Glu Arg Phe Asp Leu Ala Arg Ala Leu
365 370 375

Pro Lys Pro Thr Phe Lys Pro Lys Leu Pro Arg Pro Lys His Glu
380 385 390

Ser Lys Pro Pro Leu Pro Pro Thr Val Gly Ala Thr Glu Pro Gly
395 400 405

Pro Glu Thr Asp Ala Asp Ala Glu His Ile Ser Phe His Lys Ile
410 415 420

Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Leu Val Ile Leu
425 430 435

Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys
440 445 450

Gln Leu Gln Gln Arg Ser Leu Met Arg Arg His Arg Lys Lys Lys
455 460 465

Arg Gln Ser Leu Lys Gln Met Thr Pro Ser Thr Gln Glu Phe Tyr
470 475 480

Val Asp Tyr Lys Pro Thr Asn Thr Glu Thr Ser Glu Met Leu Leu
485 490 495

Asn Gly Thr Gly Pro Cys Thr Tyr Asn Lys Ser Gly Ser Arg Glu
500 505 510

Cys Glu Val

<210> 125
<211> 998
<212> DNA
<213> Homo Sapien

<400> 125
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gtccggctgc gcggctaccg tggccgagct agcaaccttt cccctggatc 150
tcacaaaaaac tcgactccaa atgcaaggag aagcagctct tgctcggttg 200
ggagacggtg caagagaatc tgcccctat agggaatgg tgcgcacagc 250
cctagggatc attgaagagg aaggcttct aaagcttgg caaggagtga 300

cacccgccccat ttacagacac gtagtgtatt ctggaggctcg aatggtcaca 350
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
tccccttgg aaatcagtca ttggagggat gatggctggt gttattggcc 450
agtttttagc caatccaact gacctagtgta aggttcagat gcaaatggaa 500
gaaaaaagga aacttggaaagg aaaaccattg cgatttcgtg gtgtacatca 550
tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttggcag 600
gctgggtacc caatatacaa agagcagcac tggtaatat gggagattta 650
accacttatg atacagtgaa acactacttg gtattgaata caccacttga 700
ggacaatatac atgactcactg gtttatcaag tttatgttct ggactggtag 750
cttctattct gggAACACCA gccgatgtca tcaaaAGCAG aataatgaat 800
caaccacgag ataaacaagg aaggggactt ttgtataaat catcgactga 850
ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
gcttttacc atcttggctg agaatgaccc cttggtaat ggtgttctgg 950
cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met	Ser	Val	Pro	Glu	Glu	Glu	Arg	Leu	Leu	Pro	Leu	Thr	Gln
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Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20				25				30		

Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35				40				45		

Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
			50				55				60			

Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
			65					70				75		

Leu	Gly	Ile	Ile	Glu	Glu	Glu	Phe	Leu	Lys	Leu	Trp	Gln	Gly	
				80				85				90		

Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95				100				105		

Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110				115				120		

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
125 130 135
Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
140 145 150

Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
155 160 165

Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
170 175 180

Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
185 190 195

Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
200 205 210

Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
215 220 225

Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
230 235 240

Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg
245 250 255

Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr
260 265 270

Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly
275 280 285

Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met
290 295 300

Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg
305 310 315

Glu Met Ser Gly Val Ser Pro Phe
320

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

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ggcgtgggcc catggccagg cccggcatgg agcggtggcg cgaccggctg 150

gcgctggta cggggccctc ggggggcatac ggccggccg tggccggc 200

cctggtccag cagggactga aggtggtgg ctgcggccgc actgtggca 250

acatcgagga gctggctgct gaatgtaaga gtgcaggcta ccccgggact 300
ttgatccctt acagatgtga cctatcaa at gaagaggaca tcctctccat 350
gttctcagct atccggttctc agcacagcgg tgttagacatc tgcatcaaca 400
atgctggctt ggccggcct gacaccctgc tctcaggcag caccagtgt 450
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ggaaggctac cagtcattga aggagcggaa tgtggacat gggcacatca 550
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cacttctata gtgccaccaa gtatgccgtc actgcgtga cagaggact 650
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cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccgaa 800
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tgggagctcc tcctccctc cccacccttc atggcttgcc tcctgcctct 950
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aaaaaa 1505

<210> 128
<211> 260
<212> PRT
<213> Homo Sapien

<400> 128
Met Ala Arg Pro Gly Met Glu Arg Trp Arg Asp Arg Leu Ala Leu
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Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala
20 25 30

Leu Val Gln Gln Gly Leu Lys Val Val Gly Cys Ala Arg Thr Val
35 40 45

Gly Asn Ile Glu Glu Leu Ala Ala Glu Cys Lys Ser Ala Gly Tyr
50 55 60

Pro Gly Thr Leu Ile Pro Tyr Arg Cys Asp Leu Ser Asn Glu Glu
65 70 75

Asp Ile Leu Ser Met Phe Ser Ala Ile Arg Ser Gln His Ser Gly
80 85 90

Val Asp Ile Cys Ile Asn Asn Ala Gly Leu Ala Arg Pro Asp Thr
95 100 105

Leu Leu Ser Gly Ser Thr Ser Gly Trp Lys Asp Met Phe Asn Val
110 115 120

Asn Val Leu Ala Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser
125 130 135

Met Lys Glu Arg Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn
140 145 150

Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe
155 160 165

Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu
170 175 180

Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys
185 190 195

Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His
200 205 210

Asp Lys Asp Pro Glu Lys Ala Ala Thr Tyr Glu Gln Met Lys
215 220 225

Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu
230 235 240

Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro
245 250 255

Thr Glu Gln Val Thr
260

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129
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ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
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ttcagtagcc accagccacc tgtggccgtt gagtgcttga aatgaggaac 350
tgagaaaatt aatttctcat gtattttctt catttattta ttaattttta 400
actgatagtt gtacatattt ggggtacat gtgatatttgcatacatgt 450
tacaatatata aatgatcaaa tcagggtaac tggatatcc atcacatcaa 500
acatttattt tttattcttt ttagacagag tctcactctg tcacccaggc 550
tggagtgcag tgggccatc tcagcttact gcaacctctg cctgccaggt 600
tcaagcgatt ctcatgcctc cacctccaa gtagctggga ctacaggcat 650
gcaccacaat gccaactaa ttttgtatt ttttagtagag acggggtttt 700
gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
gcctaaacat ttatctttc tttgtgtgg gaactttgaa attatacaat 850
gaattattgt taactgtcat ctccctgctg tgctatggaa cactggact 900
tcttcctct atctaactgt atatttgac cagttAACCA accgtacttc 950
atccccactc ctctctatcc ttcccaacct ctgatcacct cattctactc 1000
tctaccccca tgagatccac ttttttagct cccacatgtg agtaaaaaaa 1050
tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
tcctgttcca tccatgttgc tgcaaATGAC aggatttcgt tcttaatttc 1150
aattaaaaata accacacatg gcaaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val

1	5	10	15
Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro			
20	25		30
Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg			
35	40		45
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val			
50	55		60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro			
65	70		75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser			
80	85		90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val			
95 ..	100	..	105
Ala Val Glu Cys Leu Lys			
110			

<210> 131
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 131
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 gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
 tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg ctttctgaca 200
 tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
 caaccaaata aataatgctg ggattccttc agatttgaaa aacttgcgtga 300
 aagtagaaag aatataccta taccacaaca gtttagatga atttccttacc 350
 aacctccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
 gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
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 cgagacagca actatctccg actgctttc ctgtcccgta atcaccttag 550
 cacaattccc tggggtttgc ccaggactat agaagaacta cgcttggatg 600
 ataatcgcat atccactatt tcatcaccat ctcttcaagg tctcactagt 650
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aagctttatc ttcaagataa ccacatcaat cgggtcccc caaatgctt 850
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gtaatttacc tcagggtatac tttgatgatt tggacaatat aacacaactg 950
attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
tgactggta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050
gccaagcccc agaaaagggtt cgtggatgg ctattaagga tctcaatgca 1100
gaactgtttg attgttaagga cagtggatt gtaagcacca ttcaagataac 1150
cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200
cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
caaaccacag ggagtccctc aagaaaaaca attacaatta ctgtgaagtc 1300
tgtcacctct gataccattc atatctttg gaaacttgct ctacctatga 1350
ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
tctataacag aaacaattgt aacagggaa cgcaatgtgact actgttcac 1450
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ccagcaacct ctacctatTTT gatgaaactc ctgtttgtat tgagactgaa 1550
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actctatcct ggaatcagg gaaacttctt ttcaatgtt accaataagc 1850
aatgaaccca tctcaagga ggagttgtt atacacacca tatttcctcc 1900
taatggaatg aatctgtaca aaaacaatca cagtgaaagc agtagtaacc 1950
gaagctacag agacagtggt attccagact cagatcactc acactcatga 2000
tgctgaagga ctcacagcag acttgtgttt tgggtttttt aaacctaagg 2050
gaggtgatgg t 2061

<211> 649
<212> PRT
<213> Homo Sapien

<400> 132
Met Ile Ser Ala Ala Trp Ser Ile Phe Leu Ile Gly Thr Lys Ile
1 5 10 15
Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser
20 25 30
Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn
35 40 45
Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
50 55 60
Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
65 — 70 75
Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
80 85 90
Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
95 100 105
Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr
110 115 120
Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu
125 130 135
Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe
140 145 150
Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His
155 160 165
Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu
170 175 180
Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu
185 190 195
Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu
200 205 210
Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe Asn Leu Val
215 220 225
Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala
230 235 240
Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu Gln
245 250 255
Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu

	260	265	270
Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn			
275	280	285	
Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu			
290	295	300	
Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp			
305	310	315	
Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg			
320	325	330	
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile			
335	340	345	
Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile			
350	355	360	
Val Ser Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr			
365	370	375	
Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp			
380	385	390	
Ile Lys Asn Pro Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser			
395	400	405	
Pro Ser Arg Lys Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser			
410	415	420	
Asp Thr Ile His Ile Ser Trp Lys Leu Ala Leu Pro Met Thr Ala			
425	430	435	
Leu Arg Leu Ser Trp Leu Lys Leu Gly His Ser Pro Ala Phe Gly			
440	445	450	
Ser Ile Thr Glu Thr Ile Val Thr Gly Glu Arg Ser Glu Tyr Leu.			
455	460	465	
Val Thr Ala Leu Glu Pro Asp Ser Pro Tyr Lys Val Cys Met Val			
470	475	480	
Pro Met Glu Thr Ser Asn Leu Tyr Leu Phe Asp Glu Thr Pro Val			
485	490	495	
Cys Ile Glu Thr Glu Thr Ala Pro Leu Arg Met Tyr Asn Pro Thr			
500	505	510	
Thr Thr Leu Asn Arg Glu Gln Glu Lys Glu Pro Tyr Lys Asn Pro			
515	520	525	
Asn Leu Pro Leu Ala Ala Ile Ile Gly Gly Ala Val Ala Leu Val			
530	535	540	
Thr Ile Ala Leu Leu Ala Leu Val Cys Trp Tyr Val His Arg Asn			

	545	550	555
Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr Ser Lys Gly Arg Arg			
560	565	570	
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser			
575	580	585	
Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser			
590	595	600	
Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe			
605	610	615	
Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser			
620	625	630	
Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp			
635	640	645	
His Ser His Ser			

<210> 133
<211> 1882
<212> DNA
<213> Homo Sapien
<400> 133
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ccaggcttct tggcagccct gccgggccac ttgtcttcat gtctgccagg 100
gggaggtggg aaggaggtgg gaggagggcg tgcagaggca gtctgggctt 150
ggccagagct cagggtgctg acggtgtgac cagcagttag cagaggccgg 200
ccatggccag cctggggctg ctgctcctgc tcttactgac agcaactgcca 250
ccgctgttgtt cctcctcaact gcctgggctg gacactgctg aaagtaaagc 300
caccattgca gacctgatcc tgtctgcgct ggagagagcc accgtcttcc 350
tagaacagag gctgcctgaa atcaacctgg atggcatggt gggggtccga 400
gtgctggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450
cctgctgcag ccgctgagcc tgcgctggg gatgctgggg gagaagctgg 500
aggctgccat ccagagatcc ctccactacc tcaagctgag tgatcccaag 550
tacctaagag agttccagct gaccctccag cccgggtttt ggaagctccc 600
acatgcctgg atccacactg atgcctcctt ggtgtacccc acgttcgggc 650
cccaggactc attctcagag gagagaagtg acgtgtgcct ggtgcagctg 700
ctggaaaccg ggacggacag cagcgagccc tgccgcctct cagacctctg 750

caggaggcctc atgacccaagc ccggctgctc aggctactgc ctgtccccacc 800
aactgctctt cttccctctgg gccagaatga ggggatgcac acagggacca 850
ctccaacaga gccaggacta tatcaacctc ttctgcgcaca acatgatgga 900
cttgaaccgc agagctgagg ccatcgata cgccctaccct accccggaca 950
tcttcatgga aaacatcatg ttctgtggaa tgggcggctt ctccgacttc 1000
tacaagctcc ggtggctgga ggccattctc agctggcaga aacagcagga 1050
aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100
ttcaatatca gcagcatttt tcgaggagag tgaagaggcg agaaaaacaa 1150
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cggtcaactg caacctttgc ctccctgggtt caagcaattc tcttgccctca 1250
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ttttatattt ttttagtaga gacagggttt catcatgttgc tctatgctgg 1350
tctcgaactc ctgatctcaa gagatccgcc cacctcaggc tcccaaagtg 1400
tgggattata ggtgtgagcc accgtgtctg gctgaaaagc actttcaaag 1450
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cagagagcca cacccatcca caccgccacc accaagcagc cgctgagacg 1650
gacggttcca tgccagctgc ctggaggagg aacagacccc ttttagtcctc 1700
atcccttaga tcctggaggg cacggatcac atcctggaa gaaggcatct 1750.
ggaggataag caaagccacc ccgacaccca atcttgaaag ccctgagtag 1800
gcagggccag ggtaggtggg ggccgggagg gacccaggtg tgaacggatg 1850
aataaaagttc aactgcaact gaaaaaaaaaa aa 1882

<210> 134
<211> 440
<212> PRT
<213> Homo Sapien

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<400> 134
Met Ser Ala Arg Gly Arg Trp Glu Gly Gly Arg Arg Ala Cys
      1           5           10          15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val
      20          25          30

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Thr Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu
35 40 45

Leu Leu Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser
50 55 60

Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp
65 70 75

Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln
80 85 90

Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly Val Arg Val
95 100 105

Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala Gln Glu
110 115 120

Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly Glu
125 130 135

Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
140 145 150

Ser Asp Pro Lys Tyr Leu Arg Glu Phe Gln Leu Thr Leu Gln Pro
155 160 165

Gly Phe Trp Lys Leu Pro His Ala Trp Ile His Thr Asp Ala Ser
170 175 180

Leu Val Tyr Pro Thr Phe Gly Pro Gln Asp Ser Phe Ser Glu Glu
185 190 195

Arg Ser Asp Val Cys Leu Val Gln Leu Leu Gly Thr Gly Thr Asp
200 205 210

Ser Ser Glu Pro Cys Gly Leu Ser Asp Leu Cys Arg Ser Leu Met
215 220 225

Thr Lys Pro Gly Cys Ser Gly Tyr Cys Leu Ser His Gln Leu Leu
230 235 240

Phe Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu
245 250 255

Gln Gln Ser Gln Asp Tyr Ile Asn Leu Phe Cys Ala Asn Met Met
260 265 270

Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr Pro Thr
275 280 285

Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys Gly Met Gly Gly
290 295 300

Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser
305 310 315

Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu
320 325 330
Asp Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser
335 340 345
Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro Asp Ser Arg Ser
350 355 360
Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln
365 370 375
Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ile Leu Pro
380 385 390
Ser Ser Trp Asp Tyr Arg Ser Val Pro Pro Tyr Leu Ala Asn Phe
395 400 405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala
410 415 420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser
425 430 435
Gln Ser Val Gly Leu
440

<210> 135

<211> 884

<212> DNA

<213> Homo Sapien

<400> 135

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cccgctctgc tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100
ccccggggct gctgctgagg gatcgggagg gagtggggtc ggcataaggag 150

atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200

gactggatct cggcggcccg agtgctggta gacggagaag agcacgtcgg 250

tttccttaag acagatggga gttttgttgt tcatgatata ccttctggat 300

cttatgttagt ggaagttgta tctccagctt acagatttga tcccgttcga 350

gtggatataca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400

caaaacatca gaggttgtca gactgcccta tcctctccaa atgaaatctt 450

caggtccacc ttcttacttt attaaaaggg aatcgtgggg ctggacagac 500

tttctaatga acccaatggt tatgatgatg gttcttcctt tattgatatt 550

tgtgcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600

aatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650

gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaatac 700
tagcagcggc agcagtaaaa caggcaaaag tggggctggc aaaaggaggt 750
agtcaggccg tccagagctg gcatttgacaa acacacggca acactgggtg 800
gcataccaatgt ctggaaaac cgtgtgaagc aactactata aacttgagtc 850
atccccgacgt tgatctctta caactgtgta tgtt 884

<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met	Ala	Ala	Ala	Leu	Trp	Gly	Phe	Phe	Pro	Val	Leu	Leu	Leu	Leu
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Leu	Leu	Ser	Gly	Asp	Val	Gln	Ser	Ser	Glu	Val	Pro	Gly	Ala	Ala
		20					25						30	
Ala	Glu	Gly	Ser	Gly	Gly	Ser	Gly	Val	Gly	Ile	Gly	Asp	Arg	Phe
	35					40							45	
Lys	Ile	Glu	Gly	Arg	Ala	Val	Val	Pro	Gly	Val	Lys	Pro	Gln	Asp
	50					55							60	
Trp	Ile	Ser	Ala	Ala	Arg	Val	Leu	Val	Asp	Gly	Glu	Glu	His	Val
	65						70						75	
Gly	Phe	Leu	Lys	Thr	Asp	Gly	Ser	Phe	Val	Val	His	Asp	Ile	Pro
	80							85					90	
Ser	Gly	Ser	Tyr	Val	Val	Glu	Val	Val	Ser	Pro	Ala	Tyr	Arg	Phe
	95							100					105	
Asp	Pro	Val	Arg	Val	Asp	Ile	Thr	Ser	Lys	Gly	Lys	Met	Arg	Ala
	110						115						120	
Arg	Tyr	Val	Asn	Tyr	Ile	Lys	Thr	Ser	Glu	Val	Val	Arg	Leu	Pro
	125							130					135	
Tyr	Pro	Leu	Gln	Met	Lys	Ser	Ser	Gly	Pro	Pro	Ser	Tyr	Phe	Ile
	140							145					150	
Lys	Arg	Glu	Ser	Trp	Gly	Trp	Thr	Asp	Phe	Leu	Met	Asn	Pro	Met
	155							160					165	
Val	Met	Met	Met	Val	Leu	Pro	Leu	Leu	Ile	Phe	Val	Leu	Leu	Pro
	170							175					180	
Lys	Val	Val	Asn	Thr	Ser	Asp	Pro	Asp	Met	Arg	Arg	Glu	Met	Glu
	185							190					195	
Gln	Ser	Met	Asn	Met	Leu	Asn	Ser	Asn	His	Glu	Leu	Pro	Asp	Val

	200	205	210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys			
215	220	225	
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys			
230	235	240	
Arg Arg			

<210> 137
<211> 1571
<212> DNA
<213> Homo Sapien

<400> 137
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gtgggtctga ggggaccaga agggtgagct acgttggctt tctggaagg 100
gaggctatac gcgtcaattc cccaaaacaa gtttgacat ttccccctgaa 150
atgtcatttc ctatctattc actgcaagtg cctgctgttc caggccttac 200
ctgctggcca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
cgacctgtgc caccactcg cactcagact ctgaactcag acctgaaatc 300
ttctcttcac gggaggcttg gcagttttc ttactcctgt ggtctccaga 350
tttcaggcct aagatgaaag cctctagttc tgccttcagc cttctctctg 400
ctgcgtttta tctccttatgg actccttcca ctggactgaa gacactcaat 450
ttgggaagct gtgtgatcgc cacaacaccc cagggaaatac gaaatggatt 500
ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550
aatcttaag gaggactgag tcttgcaag acacaaagcc tgcgaatcga 600
tgctgcctcc tgcgccattt gctaagactc tatctggaca gggtatttaa 650
aaactaccag acccctgacc attatactct ccggaaagatc agcagcctcg 700
ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgccac 750
atgacatgcc attgtggga ggaagcaatg aagaaataca gccagattct 800
gagtcacttt gaaaagctgg aacctcagggc agcagttgtg aaggcttgg 850
gggaactaga cattcttctg caatggatgg aggagacaga ataggagggaa 900
agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
acctgcagag gaggcatgac cccaaaccac catctttta ctgtactagt 1000
cttgtctgg tcacagtgtta tcttattttt gcattacttg cttccttgca 1050

tgattgtctt tatgcatacc caatcttaat tgagaccata cttgtataag 1100
atttttgtaa tatctttctg ctattggata tatttatttag ttaatatatt 1150
tatttatattt ttgcattta atgtattat tttttactt ggacatgaaa 1200
ctttaaaaaaa attcacagat tatattata acctgactag agcaggtgat 1250
gtatTTTat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
ctaggggggt tattcatttgcattcaacta aggacatatt tactcatgct 1350
gatgctctgt gagatatttgcatttgaacc aatgactact taggatgggt 1400
tgtggaataa gtttgatgt ggaattgcac atctacctta caattactga 1450
ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550
ccaaaaaaaaa aaaaaaaaaa a 1571

<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

Met Arg Gln Phe Pro Lys Thr Ser Phe Asp Ile Ser Pro Glu Met
1 5 10 15

Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu
20 25 30

Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
95 100 105

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu

	140	145	150
Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys			
155	160	165	
Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe			
170	175	180	
Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser			
185	190	195	
Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu			
200	205	210	
Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys			
215	220	225	
Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln			
230	235	240	
Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln			
245	250	255	
Trp Met Glu Glu Thr Glu			
260			

<210> 139
<211> 2395
<212> DNA
<213> Homo Sapien

<400> 139
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tcgctacctg ttgcgttagcg atcgaggtgc tagggatcgc ggttttcctt 150
cggggattct tccccgtcc cggtcgatcc tctgccagag cggAACACGG 200
agcggagccc ccagcgcccg aaccctcgcc tggagccagt tctaactgga 250
ccacgctgcc accacctctc ttcaagtttttgc ttgttattgt tctgatagat 300
gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350
ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400
aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
gggagccttc ctggctttgt cgacgtcatc aggaacctca attctcctgc 500
actgctggaa gacagtgtga taagacaagc aaaaggcagct ggaaaaagaa 550
tagtctttta tggagatgaa acctgggtta aattattccc aaagcatttt 600
tggaatatg atgaaacaac ctcattttc gtgtcagatt acacagaggt 650

ggataataat gtcacgaggc atttggataa agtattaaaa agaggagatt 700
gggacatatt aatccctccac tacctgggc tggaccacat tggccacatt 750
tcagggcca acagccccct gattgggcag aagctgagcg agatggacag 800
cgtgctgatg aagatccaca cctcaactgca gtcgaaggag agagagacgc 850
ctttacccaa tttgctggtt ctttgtggtg accatggcat gtctgaaaca 900
ggaagtcacg gggcctcctc caccgaggag gtgaatacac ctctgatttt 950
aatcagttct gcgtttgaaa ggaaacccgg tgatatccga catccaaagc 1000
acgtccaata gacggatgtg gctgcacac tggcgatagc acttggctta 1050
ccgattccaa aagacagtgt agggagcctc ctattccag ttgtggaagg 1100
aagaccaatg agagagcagt tgagatttt acatttgaat acagtgcagc 1150
ttagtaaact gttgcaagag aatgtgccgt catatgaaaa agatcctggg 1200
ttttagcagt ttAAAATgtc agaaagattt catggaaact ggatcagact 1250
gtacttggag gaaaagcatt cagaagtcct attcaacctg ggctccaagg 1300
ttctcaggca gtacctggat gctctgaaga cgctgagctt gtccctgagt 1350
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gttaccaagg tgattgtaaa gagctggcg tcacagagga acaagcccc 1800
cagctgaggg ggtgtgtgaa tcggacagcc tcccaagcaga ggtgtggag 1850
ctgcagctga gggaaagaaga gacaatccgc ctggacactc aggagggtca 1900
aaaggagact tggtcgcacc actcatcctg ccaccccccag aatgcaccc 1950
gcctcatcag gtccagattt ctttccaagg cggacgtttt ctgttggaaat 2000
tcttagtcct tggcctcgga cacttcatt cgttagctgg ggagtgggtgg 2050

tgaggcagt g aagaagaggc ggatggtcac actcagatcc acagagccca 2100
ggatcaaggg acccaactgca gtggcagcag gactgttggg cccccacccc 2150
aaccctgcac agccctcatc ccctttggc ttgagccgtc agaggccctg 2200
tgctgagtgt ctgaccgaga cactcacagc tttgtcatca gggcacaggc 2250
ttcctcgag ccagtagatct ctgtgccacg cttgcacctc gggcccatct 2300
gggctcatgc tctctctcct gctattgaat tagtacctag ctgcacacag 2350
tatgttagta caaaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile
1 5 10 15

Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala
20 25 30

Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro
35 40 45

Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu
50 55 60

Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala
65 70 75

Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met
80 85 90

Pro Tyr Thr Thr Tyr Leu Val Glu Lys Gly Ala Ser His Ser Phe
95 100 105

Val Ala Glu Ala Lys Pro Pro Thr Val Thr Met Pro Arg Ile Lys
110 115 120

Ala Leu Met Thr Gly Ser Leu Pro Gly Phe Val Asp Val Ile Arg
125 130 135

Asn Leu Asn Ser Pro Ala Leu Leu Glu Asp Ser Val Ile Arg Gln
140 145 150

Ala Lys Ala Ala Gly Lys Arg Ile Val Phe Tyr Gly Asp Glu Thr
155 160 165

Trp Val Lys Leu Phe Pro Lys His Phe Val Glu Tyr Asp Gly Thr
170 175 180

Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val

185	190	195
Thr Arg His Leu Asp Lys Val Leu Lys	Arg Gly Asp Trp Asp Ile	
200	205	210
Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser		
215	220	225
Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp		
230	235	240
Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg		
245	250	255
Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly		
260	265	270
Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val		
275	280	285
Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro		
290	295	300
Gly Asp Ile Arg His Pro Lys His Val Gln		
305	310	

<210> 141
 <211> 754
 <212> DNA
 <213> Homo Sapien

<400> 141
 ggcacgaggc aagcattcca gtttatcgta acgcacctt aaagtctgag 50
 agctactgcc ctacagaaag ttacttagtc cctaaagctg gcgctggcac 100
 tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150
 cagcacctta agaccactca cacttcaga_gtgaagaact taaaccgaa 200
 gaaattcagc attcatgacc aggtcacaa agtactggtc ctggactctg 250
 ggaatctcat agcagttcca gataaaaact acatacgccc agagatctc 300
 tttgcattag cctcatcatt gagtcagcc tctgcggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcatcca tcccttcagc tgaagaagga gaaactgtatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tctttatag 500
 ggctcaggta ggctcctgga acatgctgga gtccggcggtt caccggat 550
 gtttcattctg cacccctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaatttgaga acagggaaaca cattgaattt tcattcaac cagttgcaa 650

agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700

acgccttcct cgctaatttg aactaattgt ataaaaacac caaacctgct 750

cact 754

<210> 142

<211> 193

<212> PRT

<213> Homo Sapien

<400> 142

Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn
1 5 10 15

Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu
20 25 30

Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
35 40 45

Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
50 55 60

Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
65 70 75

Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
80 85 90

Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
95 100 105

Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
110 115 120

Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
125 130 135

Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp
140 145 150

Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr
155 160 165

Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro
170 175 180

Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp
185 190

<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

ctagagagta tagggcagaa ggatggcaga tgagtgactc cacatccaga 50
gctgcctccc tttaatccag gatcctgtcc ttcctgtcct gtaggagtgc 100
ctgttgcacat tgtgggtga gacaagtttgc tcccacaggg ctgtctgagc 150
agataagatt aaggctggg tctgtgctca attaactcct gtgggcacgg 200
ggcgtggaa gagcaaagtc agcggtgcct acagtcagca ccatgctggg 250
cctgccgtgg aaggagggtc tgtcctggc gctgctgctg cttctcttag 300
gctcccagat cctgctgatc tatgcctggc atttccacga gcaaaggac 350
tgtgatgaac acaatgtcat ggctcgttac ctccctgcca cagtggagtt 400
tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
tggggcacat cttgaattcc tggaaaggagc aggtggagtc caagactgta 500
ttctcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550
cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
tcacctgctt ctaccatc agcaccaggc cctggatgac tcagttcagc 650
ctcctgaaca agacctgctt ggagggattc cactgagtga aacccactca 700
caggcttgc catgtgctgc tcccacattc cgtggacatc agcactactc 750
tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800
attttgcatt tgttttagat ctcagatcag tgttttagaa aatccacaca 850
tcttgagcct aatcatgttag tgttagatcat taaacatcag catttaaga 900
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 950
aaaaaaaaaaa a 961

<210> 144
<211> 147
<212> PRT
<213> Homo Sapien

<400> 144
Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
1 5 10 15
Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
20 25 30
Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
35 40 45
Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
50 55 60

Gln Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn
65 70 75

Ser Trp Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu
80 85 90

Leu Leu Leu Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile
95 100 105

Asp Asn Cys His Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe
110 115 120

Thr Cys Phe Phe Thr Ile Ser Thr Arg Pro Trp Met Thr Gln Phe
125 130 135

Ser Leu Leu Asn Lys Thr Cys Leu Glu Gly Phe His
140 145

<210> 145
<211> 1157
<212> DNA
<213> Homo Sapien

<400> 145
ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaaggttct 50
gacgcgatga ggaagcacct gagctggtgg tggctggcca ctgtctgcat 100
gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaaggcaca 150
gaatcaagtg gaaccggaag gccctgccc gcactgccc gatcactgag 200
gcccgagggg ctgagaaccg cccgggagcc ttcatcaagc aaggcccaa 250
gctcgacatt gactcggag ccgagggcaa caggtactac gaggccaaact 300
actggcagtt ccccgatggc atccactaca acggctgctc tgaggcta 350
gtgaccaagg aggcatgttgc accggctgc atcaatgcca cccaggcggc 400
gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
tctggcggct ggtccaggag ctctgctccc tcaagcatttgc cgagttttgg 500
ttggagaggg ggcgaggact tcgggtcacc atgcaccaggc cagtgctc 550
ctgccttctg gcttgatct ggctcatggt gaaataagct tgccaggagg 600
ctggcagttac agagcgcagc agcgagcaaa tcctggcaag tgacccagct 650
cttctccccca aaacccacgc gtgttctgaa ggtgccagg agcggcgatg 700
cactcgcact gcaaatgccg ctcccacgta tgcgccctgg tatgtgcctg 750
cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800
ccttagcagag cgtctggcac actagattag tagtaaatgc ttgatgagaa 850

gaacacatca ggcactgcgc cacctgcttc acagtacttc ccaacaactc 900
ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950
gagctgaagt actgcaccca gcatcaccag ctagaaagtgcagagccag 1000
gattcaaccc tggcttgcgtct aaccccgaggtttctgcgtctgtccaaattcc 1050
agagctgtct ggtgatcaact ttatgtctca cagggaccca catccaaaca 1100
tgtatctcta atgaaaattgt gaaagctcca tgtagaaaa taaatgaaaa 1150
cacctga 1157

<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met
1 5 10 15

Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys
20 25 30

His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln
35 40 45

Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile
50 55 60

Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn
65 70 75

Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His
80 85 90

Tyr Asn Gly Cys Ser Glu Ala Asn Val Thr Lys Glu Ala Phe Val
95 100 105

Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe
110 115 120

Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu
125 130 135

Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu
140 145 150

Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu
155 160 165

Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys
170 175

<210> 147
<211> 333
<212> DNA
<213> Homo Sapien

<400> 147
gccttggcct cccaaaggc tggattata ggcgtgacca ccatgtctgg 50
tccagagtc catttcgtga tgatttatac actcaaagaa aactcatgtt 100
cagaagctct cttctttctt ggcctccctt ctgtcttctt tcccttttc 150
ttcttatttt aatttagtagc atctactcag agtcatgcaa gctggaaatc 200
tttcattttt cttgtcagtgg gggtaggtca ctgagtctta gtttttattt 250
tttggaaattt caactttcag attcaggggg tacatgtgaa ggtttgggg 300
atgagtatat tgcatgtatgc tgaggttgg ggt 333

<210> 148
<211> 73
<212> PRT
<213> Homo Sapien

<400> 148
Met, Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
1 5 10 15
Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
20 25 30
Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
35 40 45
Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
50 55 60
Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
65 70

<210> 149
<211> 1893
<212> DNA
<213> Homo Sapien

<400> 149
gtctccgcgt cacaggaact tcagcaccca cagggcggac agcgctcccc 50
tctacctgga gacttgactc ccgcgcggcc caaccctgct tatcccttga 100
ccgtcgagtg tcagagatcc tgcagccgcc cagtcccgcc ccctctcccg 150
ccccacaccc accctcctgg ctcttcgtt ttttactcct ccttttcatt 200
cataacaaaa gctacagctc caggagccca gcggccggct gtgaccctaa 250

ccgagcgtgg aagaatgggg ttcctcgga ccggcacttg gattctggtg 300
ttagtgctcc cgattcaagc ttccccaaa cctggaggaa gccaaagacaa 350
atctctacat aatagagaat taagtgcaga aagaccttg aatgaacaga 400
ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
aagccaggtc agagcaacta ttctttgtt gataacttga acctgctaaa 500
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600
aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
taaatttcaa gatgatccag atggcttca tcaacttagac gggactcctt 700
taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
aatgacagag ccgtgtttga caagattgtt tctaaactac ttaatctcg 800
ccttatcaca gaaagccaag cacataact ggaagatgaa gtagcagagg 850
ttttacaaaa attaatctca aaggaagcca acaattatga ggaggatccc 900
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
agtgactcca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000
atgaaacagt atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050
actaaaacct acagtgaaga caactttgag gaactccaaat atttcccaa 1100
tttctatgcg ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150
aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200
atggtgaaat atggaacaat atctccagaa gaaggtgtt cctaccttga 1250
aaacttggat gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300
atgctactga caatataagc aagctttcc cagcaccatc agagaagagt 1350
catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
atatggaagc ttgaaggatt ccacaaaaga tgataactcc aacccaggag 1450
gaaagacaga tgaacccaaa gaaaaaacag aagccttattt ggaagccatc 1500
agaaaaaaata ttgaatggtt gaagaaacat gacaaaaagg gaaataaaga 1550
agattatgac ctttcaaaga tgagagactt catcaataaa caagctgatg 1600
cttatgtgga gaaaggcatc cttgacaagg aagaagccga ggccatcaag 1650
cgcatttata gcagcctgta aaaatggcaa aagatccagg agtcttcaa 1700

ctgtttcaga aaacataata tagcttaaaa cacttctaatt tctgtgatta 1750
aaattttttg acccaagggt tattagaaag tgctgaattt acagtagtta 1800
accttttaca agtggtaaa acatagctt cttcccgtaa aaactatctg 1850
aaagtaaagt tgtatgtaag ctgaaaaaaaaaaaaaaa aaa 1893

<210> 150
<211> 468
<212> PRT
<213> Homo Sapien

<400> 150
Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu
1 5 10 15
Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser
20 25 30
Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln
35 40 45
Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
50 55 60
Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
65 70 75
Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
80 85 90
Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
95 100 105
Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
110 115 120
Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
125 130 135
Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp
140 145 150
Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg
155 160 165
Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu
170 175 180
Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu
185 190 195
Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu
200 205 210
Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys

215	220	225
Ile Pro Glu Lys Val Thr Pro Met Ala Ala Ile Gln Asp Gly Leu		
230	235	240
Ala Lys Gly Glu Asn Asp Glu Thr Val Ser Asn Thr Leu Thr Leu		
245	250	255
Thr Asn Gly Leu Glu Arg Arg Thr Lys Thr Tyr Ser Glu Asp Asn		
260	265	270
Phe Glu Glu Leu Gln Tyr Phe Pro Asn Phe Tyr Ala Leu Leu Lys		
275	280	285
Ser Ile Asp Ser Glu Lys Glu Ala Lys Glu Lys Glu Thr Leu Ile		
290	295	300
Thr Ile Met Lys Thr Leu Ile Asp Phe Val Lys Met Met Val Lys		
305	310	315
Tyr Gly Thr Ile Ser Pro Glu Glu Gly Val Ser Tyr Leu Glu Asn		
320	325	330
Leu Asp Glu Met Ile Ala Leu Gln Thr Lys Asn Lys Leu Glu Lys		
335	340	345
Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu		
350	355	360
Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys		
365	370	375
Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp		
380	385	390
Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr		
395	400	405
Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp. Leu. Lys		
410	415	420
Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys		
425	430	435
Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys		
440	445	450
Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr		
455	460	465
Ser Ser Leu		

<210> 151
<211> 2598
<212> DNA
<213> Homo Sapien

<400> 151
cggtcgagg ctccggccag gagaaaggaa cattctgagg ggagtctaca 50
ccctgtggag ctcaagatgg tcctgagtg ggcgctgtgc ttccgaatga 100
aggactcggc attgaagggtg ctttatctgc ataataacca gttcttagct 150
ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtgg 200
ccccaatcgg tggctggatg ccagcctgtc ccccgtcata ctgggtgtcc 250
agggttggaaag ccagtgcctg tcatgtgggg tggggcagga gccgactcta 300
acactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350
caagagcttc accttctacc ggcgggacat gggctcacc tccagctcg 400
agtcggctgc ctaccgggc tggttcctgt gcacggtgcc tgaagccat 450
cagcctgtca gactcaccca gcttcccag aatggtggct ggaatcccc 500
catcacagac ttctacttcc agcagtgtga cttagggcaac gtgccccca 550
gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagaccc 600
atggcggaca atcactctct ctgctctcag gaccccccacg tctgacttag 650
tggcacctg accactttgt cttctgggtc ccagtttggta taaattctga 700
gatttggagc tcagtccacg gtcctcccc actggatggt gctactgctg 750
tggAACCTG taaaaaccat gtggggtaaa ctggaaataa catgaaaaga 800
tttctgtggg ggtgggggtgg gggagtggtg ggaatcattc ctgcttaatg 850
gttaactgaca agtgttaccc tgagccccgc aggccaaccc atccccagtt 900
gagccttata gggtcagtag ctctccacat gaagtcctgt cactcaccac 950.
tgtgcaggag agggaggtgg tcatagagtc agggatctat ggcccttggc 1000
ccagccccac ccccttccct ttaatcctgc cactgtcata tgctaccctt 1050
cctatctctt ccctcatcat cttgttggt gcatgaggag gtggtgatgt 1100
cagaagaaat ggctcgagct cagaagataa aagataagta gggtatgctg 1150
atcctctttt aaaaacccaa gatacaatca aaatcccaga tgctggtctc 1200
tattcccatg aaaaagtgtt catgacatat tgagaagacc tacttacaaa 1250
gtggcatata ttgcaattta ttttaattaa aagataacca tttatatatt 1300
tctttataga aaaaagtctg gaagagttt cttcaattgt agcaatgtca 1350
gggtggtggc agtatacggtg attttcttt taattctgtt aatttatctg 1400

tatttcctaa tttttctaca atgaagatga attccttgta taaaataag 1450
aaaagaaaatt aatcttggagg taagcagagc agacatcatc tctgattgtc 1500
ctcagcctcc acttccccag agtaaatca aattgaatcg agctctgctg 1550
ctctgggttgg ttgttagtagt gatcaggaaa cagatctcag caaagccact 1600
gaggaggagg ctgtgctgag tttgtgtggc tggaatctct gggtaaggaa 1650
cttaaagaac aaaaatcatc tggtaattct ttcctagaag gatcacagcc 1700
cctgggattc caaggcattt gatccagtct ctaagaaggc tgctgtactg 1750
gttgaattgt gtcccccctca aattcacatc cttcttggaa tctcagtcgt 1800
tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
gtcatgcgg atgaaggttag acctaaattc aatatgactg gttcccttgt 1900
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950
aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000
aggattgtgg caaccatcag aagcttggaa gaggcaaaga agaattcttc 2050
cctagaggct ttagaggat aacggctctg ctgaaacctt aatctcagac 2100
ttccagcctc ctgaacgaag aaagaataaa tttcggctgt tttaagccac 2150
caaggataat tggttacagc agctctagga aactaataca gctgctaaaa 2200
tgatccctgt ctccctgtgt ttacattctg tgtgtgtccc ctcccacaat 2250
gtacccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300
gccacttcca agattagtt ataaaagaca ctgcagcttc tacttgagcc 2350
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gggggaagct agctgccatg ctatgagcag gcctataaag agacttacgt 2450
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agagactctg tgagataatc gatgtttgtt gtttaagtt gctcagttt 2550
ggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152
<211> 155
<212> PRT
<213> Homo Sapien

<400> 152
Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala
1 5 10 15

Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly
20 25 30

Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val
35 40 45

Pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly
50 55 60

Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu
65 70 75

Pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu
80 85 90

Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met
95 100 105

Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe
110 115 120

Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln
125 130 135

Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr
140 145 150

Phe Gln Gln Cys Asp
155

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

cttcagaaca ggtttccctt ccccagtcac cagttgctcg agttagaatt 50

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gcagctgcgc ccatcagctc ccactgcagg ctgtacaagt ccaacttcca 200

gcagccctat atcaccaacc gcacccat gctggctaag gaggctagct 250

tggctgataa caacacagac gttcgtctca ttggggagaa actgttccac 300

ggagtcagta tgagttagcg ctgctatctg atgaagcagg tgctgaactt 350

cacccttcaa gaagtgtgt tccctcaatc tgataggttc cagccttata 400

tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaaagcaca 450

tgtcatatgg aaggtgatga cctgcatatc cagaggaatg tgcaaaaagct 500

gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattt 550

gagaactgga tttgtgttt atgtctctga gaaatgcctg catttgacca 600
gagcaaagct gaaaaatgaa taactaaccc ccttccctg ctagaaataa 650
caatttagatg ccccaaagcg attttttta accaaaagga agatggaaag 700
ccaaactcca tcatgatggg tggattccaa atgaaccct gcgttagtta 750
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taagcataga tatttattga taacattca ttgtaactgg tggctatac 850
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cattttattt atatcatttt attaatatgg atttattttt agaaacatca 1050
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cc 1152

<210> 154

<211> 179

<212> PRT

<213> Homo Sapien

<400> 154

Met	Ala	Ala	Leu	Gln	Lys	Ser	Val	Ser	Ser	Phe	Leu	Met	Gly	Thr
1				5				10				15		

Leu	Ala	Thr	Ser	Cys	Leu	Leu	Leu	Ala	Leu	Leu	Val	Gln	Gly	
				20					25			30		

Gly	Ala	Ala	Ala	Pro	Ile	Ser	Ser	His	Cys	Arg	Leu	Asp	Lys	Ser
				35				40				45		

Asn	Phe	Gln	Gln	Pro	Tyr	Ile	Thr	Asn	Arg	Thr	Phe	Met	Leu	Ala
				50				55				60		

Lys	Glu	Ala	Ser	Leu	Ala	Asp	Asn	Asn	Thr	Asp	Val	Arg	Leu	Ile
				65				70				75		

Gly	Glu	Lys	Leu	Phe	His	Gly	Val	Ser	Met	Ser	Glu	Arg	Cys	Tyr
				80				85				90		

Leu	Met	Lys	Gln	Val	Leu	Asn	Phe	Thr	Leu	Glu	Glu	Val	Leu	Phe
				95				100				105		

Pro	Gln	Ser	Asp	Arg	Phe	Gln	Pro	Tyr	Met	Gln	Glu	Val	Val	Pro
				110				115				120		

Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu
125 130 135

Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp
140 145 150

Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly
155 160 165

Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn Ala Cys Ile
170 175

<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

<400> 155

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ttccacgagg cctgtcagtc agtgccccac ttgtgactga gtgtgcagtg 100
cccagcatgt accaggtcag tgcagagggc tgcctgaggg ctgtgcttag 150
agggagagga gcagagatgc tgctgagggg ggagggaggg caagctgcca 200
gttttggggc tgggggccaa gtggagttag aaactggat cccaggggga 250
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ctgaggagct gctgaggtgg agcactgtgc ctgtgcctcc cctagagcct 450
gctaggccca accgccaccc agagtcctgt agggccagtg aagatggacc 500
cctcaacagc agggccatct cccccctggag atatgagttg gacagagact 550
tgaaccggct cccccaggac ctgtaccacg cccgttgct gtgcccgcac 600
tgcgtcagcc tacagacagg ctccccatcg gaccccccggg gcaactcgga 650
gctgctctac cacaaccaga ctgtcttcta caggcggcca tgccatggcg 700
agaagggcac ccacaagggc tactgcctgg agcgcaggct gtaccgtgtt 750
tccttagctt gtgtgtgtgt gcggccccgt gtgtatggct agccggacct 800
gctggaggct ggtccctttt tgggaaacct ggagccaggt gtacaaccac 850
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tctggagcag caggatcccg ggacaggatg gggggctttg gggaaaacct 950
gcacttctgc acatttgaa aagagcagct gctgcttagg gccgccccaa 1000

gctgggtgtcc tgtcatttc tctcaggaaa ggtttcaaa gttctgccca 1050
tttctggagg ccaccactcc tgtctcttcc tctttccca tcccctgcta 1100
ccctggcca gcacaggcac tttctagata tttccccctt gctggagaag 1150
aaagagcccc tggtttatt tggttgtta ctcatcaactc agtgagcatc 1200
tactttgggt gcattctagt gtagttacta gtctttgac atggatgatt 1250
ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300
ctttatcaa aaataaaaaa 1320

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser
1				5				10					15	

Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr
				20				25					30	

His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln
				35				40					45	

Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro
					50				55				60	

Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg
				65				70					75	

Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp
					80			85					90	

Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu
					95				100				105	

Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr
					110				115				120	

Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His
					125				130				135	

Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly
						140			145				150	

Thr	His	Lys	Gly	Tyr	Cys	Leu	Glu	Arg	Arg	Leu	Tyr	Arg	Val	Ser
						155			160				165	

Leu	Ala	Cys	Val	Cys	Val	Arg	Pro	Arg	Val	Met	Gly			
					170				175					

<210> 157
<211> 1515
<212> DNA
<213> Homo Sapien

<400> 157
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cgtaccccgaa gagccgaccg ttcaatgtgg ctctgaaact gggccatctc 100
cagagtggat gctacaacat gatctaattcc ccggagactt gagggacctc 150
cgagtagaaac ctgttacaac tagtgttgcac acagggactt attcaatttt 200
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggta 250
aggccaccaa gatttgtgtg acgggcaaaa gcaacttcca gtcctacagc 300
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
tggtggtaaa tggacatttt cctacatcggtt cttccctgtta gagctgaaca 400
cagtctatTTT cattggggcc cataatattc ctaatgcaaa tatgaatgaa 450
gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
cataatgaaa tataaaaaaaa agtgtgtcaa ggccggaagc ctgtgggatc 550
cgaacatcac tgcttgtaag aagaatgagg agacagttaga agtgaacttc 600
acaaccactc ccctgggaaa cagatacatg gcttttatcc aacacagcac 650
tatcatcggtt ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacgggt 750
cagctgactc catatTTTcc tacttgtggc agcgactgca tccgacataaa 800
aggaacagtt gtgctctgcc cacaacacagg cgccccccctt cctctggata 850
acaacaaaag caagccggga ggctggctgc ctctcctcct gctgtctctg 900
ctggtggcca catgggtgtt ggtggcaggg atctatctaa tgtggaggca 950
cgaaaggatc aagaagactt cctttctac caccacacta ctgggggggg 1000
ttaagggtct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
tgttacttca ctgaatttct tcaaaaccat tgcagaagtg aggtcatcct 1100
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cagtgagaac tctcaagacc tcttccccct tgccttaac ctgggggggg 1300

gtgatctaag aagccagatt catctgcaca aatacgtggt ggtctacttt 1350
agagagatg atacaaaaga cgattacaat gctctcagtg tctgccccaa 1400
gtaccacctc atgaaggatg ccactgcctt ctgtgcagaa cttctccatg 1450
tcaaggcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
tgctgctcct tgttag 1515

<210> 158
<211> 502
<212> PRT
<213> Homo Sapien

<400> 158
Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala
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Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro
20 25 30

Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
35 40 45

Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
50 55 60

Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
65 70 75

Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
80 85 90

Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
95 100 105

Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr
110 115 120

Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
125 130 135

Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
140 145 150

Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
155 160 165

Ile Met Lys Tyr Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
170 175 180

Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu
185 190 195

Val Asn Phe Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu

200 205 210
Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu Pro
215 220 225
His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr
230 235 240
Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro
245 250 255
Thr Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu
260 265 270
Cys Pro Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser
275 280 285
Lys Pro Gly Gly Trp Leu Pro Leu Leu Leu Leu Ser Leu Leu Val
290 295 . 300
Ala Thr Trp Val Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His
305 310 315
Glu Arg Ile Lys Lys Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro
320 325 330
Pro Ile Lys Val Leu Val Val Tyr Pro Ser Glu Ile Cys Phe His
335 340 345
His Thr Ile Cys Tyr Phe Thr Glu Phe Leu Gln Asn His Cys Arg
350 355 360
Ser Glu Val Ile Leu Glu Lys Trp Gln Lys Lys Lys Ile Ala Glu
365 370 375
Met Gly Pro Val Gln Trp Leu Ala Thr Gln Lys Lys Ala Ala Asp
380 385 390
Lys Val Val Phe Leu Leu Ser Asn Asp Val Asn . Ser Val Cys Asp
395 400 405
Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser Glu Asn Ser Gln
410 415 420
Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser Asp Leu Arg
425 430 435
Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe Arg Glu
440 445 450
Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro Lys
455 460 465
Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu
470 475 480
His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys

485

490

495

His Asp Gly Cys Cys Ser Leu
500

<210> 159

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

agccaccaggc gcaacatgac agtgaagacc ctgcattggcc cagccatgg 50

caagtacttg ctgtgtcgta tattggggct tgcctttctg agtgaggcgg 100

cagctcggaa aatccccaaa gtaggacata ctttttcca aaagcctgag 150

agttgcccgc ctgtgccagg aggttagtatg aagcttgaca ttggcatcat 200

caatgaaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250

cctccccctg gaattacact gtcacttggg accccaaccg gtacccctcg 300

gaagttgtac aggcccagtg taggaacttg ggctgcatca atgctcaagg 350

aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400

tcgtccggag gaagcaccaa ggctgctctg ttttttcca gttggagaag 450

gtgctggta ctgtggctg cacctgcgtc acccctgtca tccaccatgt 500

gcagtaagag gtgcataatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu
1 5 10 15

Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala
20 25 30

Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu
35 40 45

Ser Cys Pro Pro Val Pro Gly Gly Ser Met Lys Leu Asp Ile Gly
50 55 60

Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu
65 70 75

Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro
80 85 90

Asn Arg Tyr Pro Ser Glu Val Val Gln Ala Gln Cys Arg Asn Leu
95 100 105

Gly Cys Ile Asn Ala Gln Gly Lys Glu Asp Ile Ser Met Asn Ser
110 115 120

Val Pro Ile Gln Gln Glu Thr Leu Val Val Arg Arg Lys His Gln
125 130 135

Gly Cys Ser Val Ser Phe Gln Leu Glu Lys Val Leu Val Thr Val
140 145 150

Gly Cys Thr Cys Val Thr Pro Val Ile His His Val Gln
155 160

<210> 161
<211> 2380
<212> DNA
<213> Homo Sapien

<400> 161
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ccgccccctc tggaggctga agagggattc cagccctgc cacccacaga 150
cacgggctga ctggggtgc tgccccctt gggggggggc agcacagggc 200
ctcaggcctg ggtgccacct ggcaccta gaatgcctgt gccctggttc 250
ttgctgtcct tggcactggg ccgaagccc gtggccttt ctctggagag 300
gcttgtggg ctcaggacg ctacccactg ctctccggc ctctcctgcc 350
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ccggggcccg tgctggcgcc tacgcacctg cagacagagc tggtgctgag 450
gtgccagaag gagaccgact gtgacctctg tctgcgtgt gctgtccact 500
tggccgtgca tggcactgg gaagacccctg aagatgagga aaagtttgg 550
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ccacccggac gccgtaccccg ccctttccg caccgtgccc gtcttcacac 2150
tgccctccca actgccagac ttccctgggg ccctgcagca gcctcgcc 2200
ccgcgttccg ggcggctcca agagagagcg gagcaagtgt cccggccct 2250
tcagccagcc ctggatagct acttccatcc cccggggact cccgcggcg 2300
gacgcggggt gggaccaggg gcgggacctg gggcggggga cgggacttaa 2350

ataaaaggcag acgctgttt tctaaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser
1 5 10 15

Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala
20 25 30

Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp
35 40 45

Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val
50 55 60

Leu Ala Pro Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln
65 70 75

Lys Glu Thr Asp Cys Asp Leu Cys Leu Arg Val Ala Val His Leu
80 85 90

Ala Val His Gly His Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe
95 100 105

Gly Gly Ala Ala Asp Ser Gly Val Glu Glu Pro Arg Asn Ala Ser
110 115 120

Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr Pro Thr Ala
125 130 135

Arg Cys Val Leu Leu Glu Val Gln Val Pro Ala Ala Leu Val Gln
140 145 150

Phe Gly Gln Ser Val Gly Ser Val Val Tyr Asp Cys Phe Glu Ala
155 160 165

Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr Thr Gln Pro Arg
170 175 180

Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro Ala Leu Pro
185 190 195

Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu Val Leu
200 205 210

Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp Asn
215 220 225

Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr
230 235 240

Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys

	245	250	255
Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr			
260	265	270	
Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu			
275	280	285	
Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu			
290	295	300	
Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp			
305	310	315	
Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu			
320	325	330	
Ser Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu			
335	340	345	
Leu Lys Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu			
350	355	360	
Lys Leu Gln Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro			
365	370	375	
Leu Lys Asp Asp Val Leu Leu Leu Glu Thr Arg Gly Pro Gln Asp			
380	385	390	
Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu			
395	400	405	
Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu			
410	415	420	
Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp			
425	430	435	
Asp Leu Gly Ala. Leu Trp Ala. Cys Pro Met Asp Lys Tyr Ile His			
440	445	450	
Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala Ala			
455	460	465	
Ala Leu Ser Leu Ile Leu Leu Lys Lys Asp His Ala Lys Gly			
470	475	480	
Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser Gly Ala Ala Ala			
485	490	495	
Arg Gly Arg Ala Ala Leu Leu Tyr Ser Ala Asp Asp Ser Gly			
500	505	510	
Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu			
515	520	525	
Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser			

530	535	540
Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr		
545	550	555
Leu Gln Glu Gly Gly Val Val Val Leu Leu Phe Ser Pro Gly Ala		
560	565	570
Val Ala Leu Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro		
575	580	585
Gly Ala His Gly Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys		
590	595	600
Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val		
605	610	615
Gly Ala Cys Phe Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala		
620	625	630
Leu Phe Arg Thr Val Pro Val Phe Thr Leu Pro Ser Gln Leu Pro		
635	640	645
Asp Phe Leu Gly Ala Leu Gln Gln Pro Arg Ala Pro Arg Ser Gly		
650	655	660
Arg Leu Gln Glu Arg Ala Glu Gln Val Ser Arg Ala Leu Gln Pro		
665	670	675
Ala Leu Asp Ser Tyr Phe His Pro Pro Gly Thr Pro Ala Pro Gly		
680	685	690
Arg Gly Val Gly Pro Gly Ala Gly Pro Gly Ala Gly Asp Gly Thr		
695	700	705

<210> 163

<211> 2478

<212> DNA

<213> Homo. Sapien

<400> 163

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tctgcagcac actaccctca agccacactga tgtgacctgt atctccaaag 100

tgagatcgat tcagatgatt gttcatccta cccccacgcc aatccgtgca 150

ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200

ccacttagag ctccaggtaa accgcaccta ccaaatagcac cttggaggaa 250

agcagagaga atatgagttc ttccggctga cccctgacac agagttcctt 300

ggcaccatca tgatttgcgt tcccacctgg gccaaggaga gtgcccccta 350

catgtgccga gtgaagacac tgccagacccg gacatggacc tactccttct 400

ccggagcctt cctgttctcc atgggcttcc tcgtcgca gt actctgctac 450
ctgagctaca gatatgtcac caagccgcct gcacccccc actccctgaa 500
cgtccagcga gtcctgactt tccagccgct gcgcctcatc caggagcacg 550
tcctgatccc tgtcttgac ctcagcgcc ccagcagtct ggcccagcct 600
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gagaatgggg tttgaaagga aggtgagggc tgtggccct ggacgggtac 2200
aataacacac tgtactgatg tcacaactt gcaagctctg cttgggttc 2250
agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtact 2300
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tgggatcat aacacctacc tcatggagtt gtggtaaga tgaaatgaag 2400
tcatgtctt aaagtctta atagtgcctg gtacatgggc agtgcctaat 2450
aacggtagc tatttaaaaa aaaaaaaaa 2478

<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala
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His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe
20 25 30

Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro
35 40 45

Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr
50 55 60

Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr
65 70 75

Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu
80 85 90

Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser
95 100 105

Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr
110 115 120

Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile

	125	130	135
Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp			
140	145	150	
Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr			
155	160	165	
His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly			
170	175	180	
Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr			
185	190	195	
Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys			
200	205	210	
Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp Arg			
215	220	225	
Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly			
230	235	240	
Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr			
245	250	255	
Lys Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu			
260	265	270	
Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro			
275	280	285	
Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln			
290	295	300	
Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala			
305	310	315	
Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro			
320	325	330	
Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro Gln Ile			
335	340	345	
Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val Gly			
350	355	360	
Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro			
365	370	375	
Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr			
380	385	390	
Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro Pro Ser Tyr Gly Val			
395	400	405	
Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr Gly Thr Leu Ser			

410	415	420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro		
425	430	435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val		
440	445	450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His		
455	460	465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val		
470	475	480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln		
485	490	495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser		
500	505	510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln		
515	520	525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys		
530	535	540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln		
545	550	555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val		
560	565	570
Gln Trp Glu Ser		

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<210> 165  
<211> 1060  
<212> DNA  
<213> Homo Sapien . . .
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<400> 165
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gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
tgtaccgtgg gaaagcttt gaagacttca cgggcccctga ttgtcgttt 250
gtgaatttta aaaaaggta cgatgtatat gtctactaca aactggcagg 300
gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
ttccaaaaga ttqatcaaq qtacttcata aatacacqqa aqaaqaqcta 400
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catattccag cagatgagac agactttgtc tgcttgaag gaggaagaga 450
tgatttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
agagagaaaat ctccctgagga gtctcgaaaa cgtgaacttg accctgtgcc 600
tgagccccgag gcattcagag ctgattcaga ggatggagaa ggtgcatttct 650
cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
cctcacaccca gcggcctgc ggctaacgct cagggagtgc agtcttcgtt 750
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccggaaagcg 800
aaagcagaac tggcaatagt tctcctgcct cggtggagcg ggagaagaca 850
gatgcttaca aagtccctgaa aacagaaaatg agtcagagag gaagtggaca 900
gtgcgttatt cattacagca aaggatttcg ttgcatcaa aatctaagtt 950
tgttttacaa agattgttt tagtactaag ctgccttggc agtttgatt 1000
tttgagccaa acaaaaatat attatttcc cttctaagta aaaaaaaaaa 1050
aaaaaaaaaa 1060

<210> 166

<211> 303

<212> PRT

<213> Homo Sapien

<400> 166

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Phe	Trp	Leu	Phe	Val	Leu	Gly
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Ala	Leu	Trp	Trp	Val	Pro	Gly	Gln	Ser	Asp	Leu	Ser	His	Gly	Arg
				20				25				30		

Arg	Phe	Ser	Asp	Leu	Lys	Val	Cys	Gly	Asp	Glu	Glu	Cys	Ser	Met
				35				40				45		

Leu	Met	Tyr	Arg	Gly	Lys	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp
				50				55				60		

Cys	Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Asp	Val	Tyr	Val	Tyr
				65				70				75		

Tyr	Lys	Leu	Ala	Gly	Gly	Ser	Leu	Glu	Leu	Trp	Ala	Gly	Ser	Val
				80				85				90		

Glu	His	Ser	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Lys	Val	Leu
				95				100				105		

His	Lys	Tyr	Thr	Glu	Glu	Glu	Leu	His	Ile	Pro	Ala	Asp	Glu	Thr
				110				115				120		

Asp Phe Val Cys Phe Glu Gly Gly Arg Asp Asp Phe Asn Ser Tyr
125 130 135

Asn Val Glu Glu Leu Leu Gly Ser Leu Glu Leu Glu Asp Ser Val
140 145 150

Pro Glu Glu Ser Lys Lys Ala Glu Glu Val Ser Gln His Arg Glu
155 160 165

Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro
170 175 180

Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala
185 190 195

Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln
200 205 210

Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly
215 220 225

Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys
230 235 240

Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro
245 250 255

Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys
260 265 270

Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr
275 280 285

Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys
290 295 300

Asp Cys Phe

<210> 167
<211> 2570
<212> DNA
<213> Homo Sapien

<400> 167
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tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcgg 200
caggcggcag gtcccgccg aaggcgatgc gcgcaggggg tcgggcagct 250
gggctcgggc ggcgggagta gggcccgca gggaggcagg gaggctgcat 300

attcagagtc gcgggctgcg ccctggcag aggccgcct cgctccacgc 350
aacacctgct gctgccaccg cgccgcgtatg agccgcgtgg tctcgctgct 400
gctgggcgcc gcgctgctct gcggccacgg agccttctgc cgccgcgtgg 450
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tactgaagca ggtataattc ccaatctaattt ataccaacaa 1050
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<210> 168

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

Met	Ser	Arg	Val	Val	Ser	Leu	Leu	Leu	Gly	Ala	Ala	Leu	Leu	Cys
1				5				10					15	

Gly	His	Gly	Ala	Phe	Cys	Arg	Val	Val	Ser	Gly	Gln	Lys	Val	
				20				25				30		

Cys	Phe	Ala	Asp	Phe	Lys	His	Pro	Cys	Tyr	Lys	Met	Ala	Tyr	Phe
				35				40				45		

His	Glu	Leu	Ser	Ser	Arg	Val	Ser	Phe	Gln	Glu	Ala	Arg	Leu	Ala
				50					55			60		

Cys	Glu	Ser	Glu	Gly	Gly	Val	Leu	Leu	Ser	Leu	Glu	Asn	Glu	Ala
				65				70				75		

Glu	Gln	Lys	Leu	Ile	Glu	Ser	Met	Leu	Gln	Asn	Leu	Thr	Lys	Pro
				80				85				90		

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg
95 100 105

Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln
110 115 120

Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp
125 130 135

Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln
140 145 150

Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp
155 160 165

Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr
170 175 180

Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu
185 190 195

Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu
200 205 210

Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile
215 220 225

Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe
230 235 240

Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn
245 250 255

Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly
260 265 270

Met Glu Val

<210> 169
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 169
tgtaaaacga cggccagttt aatagacctg caattattaa tct 43

<210> 170
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 170
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